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**IDENTIFIERS** CIJE; Current Index Journals in Education; Research in Education; RIE

**ABSTRACT**

A supplement to 5 previous bibliographies, this bibliography provides access to some of the latest resource material, research findings, and/or developments in outdoor education. Part I contains 143 citations and abstracts which appeared in "Resources in Education" (RIE) from the January 1975 issue through the December 1975 issue. Part II includes 61 citations of journal articles which appeared in "Current Index to Journals in Education" (CIJE) from the January 1975 issue through the December 1975 issue. In addition to outdoor education, the citations cover such topics as conservation education, educational programs, emotionally disturbed, environmental education, natural resources, nature centers, learning activities, science education, and urban environment. Types of materials cited include curriculum guides, research reports, resource guides, instructional materials, program descriptions, and teaching guides. A combined RIE and CIJE subject index is provided to assist the user in locating citations pertaining to a given subject area within the realm of outdoor education. Ordering information is included. (NQ)

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OUTDOOR EDUCATION  
A SELECTED BIBLIOGRAPHY  
(with ERIC Abstracts)

ERIC/CRESS Supplement No. 5

ERIC/CRESS

March 1976

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EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)  
CLEARINGHOUSE ON RURAL EDUCATION AND SMALL SCHOOLS (GRESS)

New Mexico State University  
Las Cruces, New Mexico 88003

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March 1976

### PREVIOUS BIBLIOGRAPHIES

Outdoor Education, A Selected Bibliography. (ED 037 285)

Outdoor Education, A Selected Bibliography. Supplement No. 1 (ED 055 702)

Outdoor Education, A Selected Bibliography (with ERIC Abstracts).  
ERIC/CRESS Supplement No. 2 (ED 073 093)

Outdoor Education, A Selected Bibliography (with ERIC Abstracts).  
ERIC/CRESS Supplement No. 3 (ED 087 582)

Outdoor Education, A Selected Bibliography (with ERIC Abstracts).  
ERIC/CRESS Supplement No. 4 (ED 101 907)

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## INTRODUCTION

The Educational Resources Information Center (ERIC) is a federally funded national information system dedicated to the improvement of education through the dissemination of educational resources and research-related materials. ERIC aids school administrators, teachers, researchers, information specialists, professional organizations, students, and others in locating and using educational resources.

Each of the ERIC network centers focuses on a separate area (or areas) of education (for a listing of the individual clearinghouses, readers should consult a current issue of Resources in Education, formerly Research in Education). It is the responsibility of the ERIC Clearinghouse on Rural Education and Small Schools (CRESS) to collect materials related to rural education and small schools, and American Indian, Mexican American, migrant, and outdoor education and to input these materials into the national ERIC system.

A main function of the ERIC system is to process documents other than current journal articles for announcement in Resources in Education (RIE), a monthly publication containing abstracts of research, research-related reports, and resource materials in education as input by the various clearinghouses. In addition, ERIC compiles the Current Index to Journals in Education (CIJE), a monthly index which provides citations from over seven hundred major publications: journals, quarterlies, annuals, and yearbooks.

### About the Bibliography

The present bibliography was compiled to provide access to some of the latest resource material, research findings, and/or developments in outdoor education. The present bibliography is a supplement to five previous ERIC/CRESS publications. The previously published bibliographies, in conjunction with the present supplement

comprise a series of bibliographies designed to provide cumulative coverage of outdoor education throughout the currently available issues of RIE and CIJE. (It should be noted that microfiche and hard copy prices in the previously published bibliographies do not reflect current ERIC Document Reproduction service pricing; however, prices given therein may be computed as per the instructions on the order blank appended to the present bibliography.)

In conducting the computer search of the ERIC tapes for the purpose of compiling this bibliography, the only term used was OUTDOOR. The output was then screened for relevance to outdoor education.

### Sources of Material

Resources in Education. Part I of the present supplement contains citations and abstracts which have appeared in RIE from the January 1975 issue through the December 1975 issue. RIE contains subject, author, and institution indexes, along with document resumes which include the ERIC accession number, author(s), title source(s), date of publication, ERIC Document Reproduction Service prices or an alternative availability, and the abstract.

For the subject index, two types of descriptive terms are available for RIE as well as CIJE: descriptors and identifiers. Descriptors are technically meaningful terms or short phrases that have been incorporated into the Thesaurus of ERIC Descriptors. Descriptors are used to characterize the document and for indexing and retrieval purposes. Only major descriptors (those preceded by an asterisk) are used for indexing purposes in this bibliography.

Proper names of persons, geographical locations, trade names, and so on may be important in describing a document. These terms, called identifiers, are not found in the Thesaurus. Identifiers are included with the citations in RIE for descriptive purposes. Major identifiers (those preceded by an asterisk) are not

indexed in this bibliography.

When using the RIE section of this bibliography, the reader is encouraged (1) to utilize the subject index in identifying relevant materials, (2) to examine the resumes to determine appropriateness of materials, and (3) to obtain microfiche or hard copy reproductions of documents from ERIC Document Reproduction Service. The reproductions must be ordered as described on the order blank appended to the present bibliographic supplement.

The reader is reminded that there are numerous complete microfiche collections of ERIC materials throughout the nation which may be used by the public. A list containing the locations of these standing orders may be found in Section IV of this publication.

Current Index to Journals in Education. Part II of this supplement, CIJE coverage, includes citations from CIJE beginning with the January 1975 issue and continuing through the December 1975 issue. Entries listed in the CIJE section of this bibliography are processed in a slightly different manner than are RIE citations. Brief annotations take the place of RIE abstracts. Furthermore, annotations are provided only when it is thought that the article being processed cannot be described adequately by a combination of major and minor descriptors, identifiers, and information in the title. Each journal citation includes the publication date, article title, personal author(s), journal title (sometimes abbreviated), and information on the volume, number, and pages. Please note that there are two CIJE entries per page.

Since CIJE entries are not available from ERIC Document Reproduction Service, the reader is encouraged to take advantage of his local library in locating the journals he wishes to use.

## The Subject Index.

A combined RIE and CIJE index is provided at the end of the present bibliography to assist the user in locating citations pertaining to a given subject area within the realm of outdoor education. The index terms, descriptors under which the citations were indexed in RIE and CIJE, are from the Thesaurus of ERIC Descriptors. Only major descriptors (those preceded by an asterisk) are indexed; major identifiers are not indexed in this bibliography.

Each citation in the bibliography is headed by an ERIC accession number. Entries from RIE are assigned an ED number; those from CIJE are assigned an EJ number. In both the RIE and CIJE sections, the citations appear in numerical order according to the accession number. The citations are referenced in the index by the accession number.

## Ordering Information

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Before ordering any item, the RIE citations should be double checked. If the citation carries the statement NOT AVAILABLE FROM EDRS, an alternate availability is given. If the citation carries the statement HC NOT AVAILABLE FROM EDRS, the publication is available in microfiche only from EDRS. If neither of the foregoing statements appears with the RIE citation, it may be assumed that the publication is available from EDRS in microfiche and hard copy. Please use the order blank appended to this bibliography when ordering microfiche or hard copy from EDRS.

Document Contributions

Persons desiring to contribute materials such as those cited in this bibliography may do so by sending one copy (two if available) to:

ERIC/CRESS Acquisitions  
New Mexico State University  
Box 3 AP  
Las Cruces, New Mexico 88003

PART I: CITATIONS FROM  
RESOURCES IN EDUCATION

p. 2 blank

3

ACCESSION NUMBER: ED095637

PUBLICATION DATE: 73

TITLE: PRINCIPLES OF SITE DEVELOPMENT: ELEMENTARY SCHOOLS  
K-6. REVISED.

DESCRIPTOR: DESIGN NEEDS; ELEMENTARY SCHOOLS; ENVIRONMENTAL  
INFLUENCES; LANDSCAPING; LAND USE; \*OUTDOOR EDUCATION;  
PHYSICAL EDUCATION; PLAY; \*SCHOOL LOCATION; \*SCHOOL  
PLANNING; SHARED FACILITIES; \*SITE DEVELOPMENT; \*SITE  
SELECTION; SPATIAL RELATIONSHIP; TRAFFIC PATTERNS

IDENTIFIER: CANADA; ONTARIO

DESCRIPTIVE NOTE: 43P. PREPARED BY ARCHITECTURAL  
SERVICES-PLANNING

THE OBJECTIVE OF THIS PUBLICATION IS TO FOCUS ATTENTION ON  
THE VARIOUS ASPECTS OF SCHOOL PROGRAMS THAT RELATE TO  
OUTDOOR USE, AND TO DETERMINE HOW THE SITE MIGHT BE  
STRUCTURED TO MEET THE SCHOOL'S EDUCATIONAL AND TRAFFIC FLOW  
REQUIREMENTS. SUBJECTS DISCUSSED INCLUDE THE INTEGRATION AND  
ORGANIZATION OF COMMUNITY AND SCHOOL FACILITIES IN ORDER TO  
REDUCE LAND AND DEVELOPMENT COSTS; SITE SELECTION CRITERIA  
THAT INDICATE THE TYPE OF SITE BEST SUITED TO FULFILL SCHOOL  
NEEDS; VARIOUS SITE USES AND THEIR RELATIONSHIP TO EACH  
OTHER; AND SITE REQUIREMENTS. THE GUIDE CONTAINS DESIGN  
CRITERIA THAT ILLUSTRATE THE PROBLEMS RELATED TO SCHOOL  
SITES INCLUDING PEDESTRIAN AND VEHICULAR MOVEMENT, PARKING,  
VISUAL SPACE, LIGHTING, PLANTING, OTHER LANDSCAPE ELEMENTS,  
CONSIDERATION OF FACTORS RELATING TO MAINTENANCE, AND THE  
DESIGN PRINCIPLES INVOLVED IN THE SOLUTION OF THESE  
PROBLEMS. (AUTHOR/MLF)

AVAILABILITY: ONTARIO GOVERNMENT BOOK STORE, 880 BAY  
STREET, TORONTO, ONTARIO M5S 1Z8 (\$2.00, CHECKS PAYABLE TO  
TREASURER OF ONTARIO. PAYMENT MUST ACCOMPANY ORDER)

4  
ACCESSION NUMBER: ED096067

PUBLICATION DATE: 56

TITLE: TEACHING IN THE SMALL COMMUNITY. YEARBOOK 1956,  
DEPARTMENT OF RURAL EDUCATION.

PERSONAL AUTHOR: FOX, ROBERT S., ED.

DESCRIPTOR: ANNOTATED BIBLIOGRAPHIES; CLASSROOM ENVIRONMENT; COMMUNITY INVOLVEMENT; \*CURRICULUM DEVELOPMENT; FAMILY LIFE; FLEXIBLE SCHEDULING; INDIVIDUALIZED INSTRUCTION; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; \*OUTDOOR EDUCATION; PARENT PARTICIPATION; RESOURCE MATERIALS; \*RURAL AREAS; \*SCHOOL COMMUNITY RELATIONSHIP; \*SMALL SCHOOLS

DESCRIPTIVE NOTE: 225P.; OUT-OF-PRINT

EDUCATORS' MAIN CONCERN IN 1956 IS WITH TEACHING IN SMALL COMMUNITIES RATHER THAN EXCLUSIVELY WITH TEACHING IN ONE-TEACHER SCHOOLS. THE MODERN RURAL SCHOOL IS LIKELY TO BE ONE WHICH SERVES AN ENTIRE COMMUNITY, USUALLY INCLUDING A HAMLET, VILLAGE, OR SMALL-TOWN CENTER AND THE SURROUNDING OPEN COUNTRY AREA. YET, THE SCHOOL TENDS TO BE SMALL (ABOUT 64 PERCENT OF ALL SCHOOL DISTRICTS HAVE FEWER THAN 10 TEACHERS AND ABOUT 11 PERCENT HAVE 40 OR MORE). WRITTEN FOR TEACHERS WHO SERVE SMALL COMMUNITIES, THE DEPARTMENT OF RURAL EDUCATION'S 1956 YEARBOOK FOCUSES ON PROBLEMS ENCOUNTERED BY TEACHERS IN SMALL SCHOOLS THROUGHOUT THE UNITED STATES. EMPHASIS IS UPON PRACTICAL APPROACHES TO THESE PROBLEMS, ALTHOUGH IT IS RECOGNIZED THAT NO SOLUTION TO ONE TEACHER'S PROBLEM CAN BE TRANSPOSED TO ANOTHER SITUATION. THE SOLUTIONS ARE BASED ON THE ASSUMPTIONS THAT (1) GOOD LEARNING EXPERIENCES UTILIZE AND GROW FROM THE CHILD'S OWN ENVIRONMENT; (2) EDUCATION IS MORE EFFECTIVE WHEN DIRECTED TOWARD THE IMPROVEMENT OF LIVING; AND (3) IT IS IMPORTANT THAT THE SCHOOL PROGRAM BE SUFFICIENTLY FLEXIBLE AND VARIED TO ALLOW EACH CHILD THE OPPORTUNITY TO GROW TO HIS MAXIMUM CAPACITY. ALSO INCLUDED ARE A 53 ITEM ANNOTATED BIBLIOGRAPHY AND THE ROSTER OF THE DEPARTMENT'S ACTIVE MEMBERS FOR THE CALENDAR YEAR 1955 AND THOSE ENROLLED PRIOR TO APRIL 1956, LISTED ALPHABETICALLY BY STATES. (NQ)

5  
ACCESSION NUMBER: ED096085

PUBLICATION DATE: 74

TITLE: TEACHER'S GUIDE TO FIFTH GRADE ENVIRONMENTAL EDUCATION.

DESCRIPTOR: AUDIOVISUAL AIDS; CAMPING; CURRICULUM DEVELOPMENT; ECOLOGY; \*ENVIRONMENTAL EDUCATION; \*GRADE 5; \*INTERDISCIPLINARY APPROACH; NATURAL RESOURCES; \*OUTDOOR EDUCATION; PERCEPTUAL DEVELOPMENT; RESOURCE MATERIALS; SCIENCE UNITS; \*TEACHING GUIDES

IDENTIFIER: ELEMENTARY AND SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; ILLINOIS; \*URBAN MISSISSIPPI RIVER ECO CENTER

DESCRIPTIVE NOTE: 153P.

THE UPPER MISSISSIPPI RIVER ECO-CENTER IS AN EXEMPLARY TITLE III, ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) ENVIRONMENTAL EDUCATION PROJECT SERVING THE SEVEN SCHOOL DISTRICTS OF CARROLL COUNTY, ILLINOIS. THE CENTER HAS BEEN INVOLVED IN THESE ASPECTS OF ENVIRONMENTAL EDUCATION: OUTDOOR EDUCATION, INSERVICE TRAINING, CURRICULUM DEVELOPMENT, REFERENCE CENTER DEVELOPMENT, RESOURCE DEVELOPMENT, AND INFORMATION DISSEMINATION. THIS HANDBOOK HAS BEEN DESIGNED FOR USE BY FIFTH GRADE TEACHERS IN CARROLL COUNTY AND AS AN AID TO OTHER SCHOOLS AND TEACHERS DEVELOPING ENVIRONMENTAL EDUCATION PROGRAMS. THE ACTIVITIES WHICH HAVE BEEN USED AND EVALUATED IN THE SEVEN COUNTY DISTRICTS, HAVE BEEN USED PRIMARILY IN FIFTH GRADE BUT MOST COULD BE ADAPTED TO OTHER GRADE LEVELS. EVALUATION OF FIFTH GRADE STUDENTS DURING THE FIRST 2 YEARS OF OPERATION SHOWED A SIGNIFICANT INCREASE IN ENVIRONMENTAL AWARENESS. TOPICS ARE: IMPLEMENTING ENVIRONMENTAL EDUCATION, ECO-CENTER FIFTH GRADE ENVIRONMENTAL EDUCATION, ENVIRONMENTAL AWARENESS, MAN AND THE RIVER, MAN AND THE ELEMENTS, SEWAGE TREATMENT PLANTS, SCHOOL CAMPING, SCHOOL-SITE ACTIVITIES, CLASSROOM INSTRUCTION, AND ADDITIONAL RESOURCES. (AUTHOR/NQ)

ACCESSION NUMBER: ED097122

PUBLICATION DATE: 26 MAR 74

TITLE: MATERIALS, EQUIPMENT, AND PRIMARY LEARNING FACTORS WHICH CAN BE UTILIZED BY EARLY CHILDHOOD EDUCATION PLANNERS IN DEVISING CREATIVE PLAYGROUNDS FOR YOUNG CHILDREN.

PERSONAL AUTHOR: WALSTON, HERMAN ERVIN

DESCRIPTOR: \*CHILD DEVELOPMENT; CHILDRENS GAMES; CREATIVE DEVELOPMENT; \*EARLY CHILDHOOD EDUCATION; EMOTIONAL DEVELOPMENT; EQUIPMENT; GUIDELINES; INTELLECTUAL DEVELOPMENT; LANDSCAPING; \*OUTDOOR EDUCATION; PERSONNEL; \*PHYSICAL DESIGN NEEDS; PHYSICAL DEVELOPMENT; PLAY; PLAYGROUND ACTIVITIES; \*PLAYGROUNDS

IDENTIFIER: ADVENTURE PLAYGROUNDS

DESCRIPTIVE NOTE: 37P.

THIS PAPER PRESENTS SUGGESTIONS AND GUIDELINES FOR PLANNING CREATIVE OUTDOOR LEARNING ENVIRONMENTS AND EXPERIENCES FOR YOUNG CHILDREN. THE DISCUSSION FOCUSES ON THE FACT THAT CHILDREN LEARN MORE READILY AND DEVELOP BETTER PHYSICALLY, INTELLECTUALLY, EMOTIONALLY, AND SOCIALLY WHEN THEIR PLAY IS ALLOWED TO BE CREATIVE AND INNOVATIVE IN NATURE. THE PHYSICAL CHARACTERISTICS OF PLAYGROUNDS WHICH FOSTER CREATIVITY ARE DESCRIBED AND NINE STIPULATIONS FOR PLAY ARE OFFERED AS GUIDELINES TO PLAYGROUND PLANNING AND DEVELOPMENT. SUGGESTIONS FOR PLAY EQUIPMENT AND PLAYGROUND PERSONNEL ARE GIVEN. AN ADVENTURE PLAYGROUND IS DESCRIBED IN WHICH CHILDREN, UNDER SUPERVISION, ARE FREE TO BUILD THEIR OWN PLAY STRUCTURES FROM A VARIETY OF MATERIALS PROVIDED. A FINAL SECTION CONTAINS DIRECTIONS FOR ACTIVITIES INVOLVING PLAYGROUND MATERIALS AND EQUIPMENT, SUCH AS ACTING GAMES, SAND AND WATER GAMES, AND GAMES USING OLD CAR TIRES AND ROPES. (SDH)

7  
ACCESSION NUMBER: ED097168

PUBLICATION DATE: JUL 74

TITLE: DISCOVERY THROUGH OUTDOOR EDUCATION. ESEA TITLE III,  
EVALUATION REPORT, SCHOOL YEAR 1973-74.

DESCRIPTOR: \*DISCOVERY LEARNING; \*HANDICAPPED CHILDREN;  
INSERVICE TEACHER EDUCATION; LEARNING LABORATORIES; \*OUTDOOR  
EDUCATION; PARENT PARTICIPATION; \*PROGRAM EVALUATION;  
\*SPECIAL EDUCATION; WORKSHOPS

DESCRIPTIVE NOTE: 46P

FUNDED IN THE FALL OF 1971, THE PROJECT "DISCOVERY THROUGH OUTDOOR EDUCATION" SERVES THE HANDICAPPED CHILDREN OF MACOMB COUNTY (MICHIGAN). THE PARTICIPANTS ARE PHYSICALLY, MENTALLY, AND EMOTIONALLY HANDICAPPED CHILDREN WHO QUALIFY FOR SPECIAL EDUCATION SERVICES. OBJECTIVES ARE TO: (1) IMPROVE YOUNGSTERS' ACHIEVEMENT IN REGULAR SCHOOL SUBJECTS, THEIR SELF-CONCEPT, INTERPERSONAL RELATIONSHIPS, AND LEISURE SKILLS; (2) TRAIN SPECIAL EDUCATION TEACHERS TO UTILIZE THE OUTDOORS FOR PROVIDING LEARNING OPPORTUNITIES TO HANDICAPPED CHILDREN; (3) TEST AN OUTDOOR EDUCATION MODEL FOR IMPROVING THE LEARNING AND LIVES OF THESE CHILDREN; (4) EDUCATE AND INVOLVE PARENTS IN THE PROGRAM; AND (5) TRAIN AND UTILIZE COLLEGE STUDENTS AS TEACHER AIDES FOR HANDICAPPED STUDENTS. DURING THE 1973-74 SCHOOL YEAR, WORKSHOPS AND LABORATORY SESSIONS DESIGNED EXCLUSIVELY FOR SPECIAL EDUCATION TEACHERS, AND HANDICAPPED STUDENTS WERE CONDUCTED BY THE PROJECT STAFF. THESE WERE EVALUATED USING EITHER STANDARDIZED ACHIEVEMENT TESTS OR CRITERION-REFERENCED MEASURES. THE RESULTS, PRESENTED IN CHRONOLOGICAL ORDER, INDICATED THE PROJECT WAS SUCCESSFUL IN ACHIEVING ITS OBJECTIVES IN THE AREA OF TEACHER INSERVICE TRAINING; THE MEAN GAIN OF THE STUDENTS ATTENDING THE OUTDOOR LABORATORIES WAS NOT GREATER THAN THAT OF THE CONTROL GROUP; AND THE OUTDOOR EDUCATION EXPERIENCE DID NOT HAVE ANY IMPACT ON STUDENT ACHIEVEMENT IN THE TRADITIONAL SENSE. (NQ)

ACCESSION NUMBER: ED097189

PUBLICATION DATE: 74

TITLE: FIELD PLOT STUDIES. PENN STATE HPER. SERIES NO. 4.

PERSONAL AUTHOR: BERRY, CHRISTINE

DESCRIPTOR: CHARTS; CURRICULUM ENRICHMENT; \*DISCOVERY  
LEARNING; ECOLOGY; \*ELEMENTARY GRADES; ENRICHMENT  
ACTIVITIES; \*NATURAL SCIENCES; \*OUTDOOR EDUCATION; RECORDS  
(FORMS); \*TEACHING GUIDES

IDENTIFIER: \*PLOT STUDIES

DESCRIPTIVE NOTE: 86P.

OUTDOOR EDUCATION TEACHING MATERIALS ARE PRESENTED FOR GRADES 3-6. THE TERM "PLOT STUDIES" ENCOMPASSES THOSE INVESTIGATIVE ACTIVITIES WHICH CAN BE CARRIED ON WITHIN A SMALL, DEFINED LAND AREA ON OR NEAR SCHOOL GROUNDS FOR THE PURPOSE OF ENHANCING AND EXTENDING CLASSROOM AND TEXTBOOK ACTIVITIES. NATURAL SCIENCE ACTIVITIES DEAL WITH PLANT AND ANIMAL ECOLOGY, SOIL, AND GEOLOGY. THE FORMAT WAS DESIGNED TO: DEVELOP OBSERVATIONAL SKILLS, PROVIDE EXPERIENCE WITH CHARTS AND RECORDING OF INFORMATION, DEVELOP A SKILL IN DRAWING CONCLUSIONS, AND DEVELOP ABILITY IN SUMMARIZING. MOST ACTIVITIES CAN BE COMPLETED IN A HALF HOUR IN ANY ORDER THE TEACHER CHOOSES, AND SECTIONS CAN BE DONE BY THEMSELVES OR AS PART OF A LARGER UNIT. SEVERAL POEMS AND A CROSSWORD PUZZLE ARE INCLUDED, AND THE TEACHER IS ENCOURAGED TO CLEARLY ESTABLISH THE INTERRELATIONSHIPS OF EACH AREA WITH EACH OTHER AREA, E.G., LANGUAGE ARTS WITH NATURAL SCIENCE. THE APPENDIX IS THE FORM FOR THE OBSERVATION CHART WHICH CAN BE USED FOR SEVERAL TOPICS OF STUDY. A BIBLIOGRAPHY CONCLUDES THE DOCUMENT. (AUTHOR/AH)

AVAILABILITY: PENN STATE UNIVERSITY, PENN STATE HPER  
SERIES, 275 RECREATION BUILDING, UNIVERSITY PARK,  
PENNSYLVANIA 16802 (\$2.00)

ACCESSION NUMBER: ED097210

PUBLICATION DATE: MAY 74

TITLE: ENVIRONMENTAL ACTIVITIES. ENVIRONMENTAL EDUCATION CURRICULUM.

DESCRIPTOR: ANIMAL BEHAVIOR; BIOLOGICAL SCIENCES; \*CURRICULUM GUIDES; \*EARLY CHILDHOOD EDUCATION; \*ELEMENTARY SCHOOL SCIENCE; \*ENVIRONMENTAL EDUCATION; INSTRUCTION; INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; \*NATURAL RESOURCES; \*OUTDOOR EDUCATION; PRIMARY EDUCATION

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

DESCRIPTIVE NOTE: 106P.; BEST COPY AVAILABLE; OCCASIONAL MARGINAL LEGIBILITY

THIS UNIT ATTEMPTS TO RESPOND TO SOCIETAL CONCERNS FOR THE RAPID DEPLETION OF OUR WORLD'S NATURAL RESOURCES, OUR INCREASING WORLD POPULATION, CURRENT POLLUTION PROBLEMS AND THE LACK OF KNOWLEDGE ABOUT NATURAL INTERDEPENDENCE. THE MATERIAL IS INTENDED AS A SOURCE FROM WHICH PRIMARY TEACHERS CAN SELECT ACTIVITIES FROM FIVE GENERALIZED GROUPS AS FOLLOWS: ANIMALS; PLANTS; WEATHER; MISCELLANEOUS ENVIRONMENTAL ACTIVITIES SUCH AS A ROCK STUDY, HOW TO USE A THERMOMETER, MAKING MICROSCOPIC SLIDES AND DISCOVERING DIRT; AND DEVELOPING OBSERVATION SKILLS AND USING ALL FIVE SENSES. EACH ACTIVITY IS INTENDED AS A SEPARATE ENTITY WITH A GENERAL FORMAT OF STATING THE ACTIVITY'S OBJECTIVES, LISTING MATERIALS NEEDED, PROVIDING BACKGROUND INFORMATION AND DESCRIBING THE ACTIVITY. (MLB)

ACCESSION NUMBER: ED097211

PUBLICATION DATE: MAR 74

TITLE: ENJOYING THE ENVIRONMENT. ENVIRONMENTAL EDUCATION CURRICULUM.

DESCRIPTOR: CAMPING; CURRICULUM GUIDES; \*ENVIRONMENTAL EDUCATION; INSTRUCTION; INSTRUCTIONAL MATERIALS; \*INTERMEDIATE GRADES; JUNIOR HIGH SCHOOLS; \*LEISURE TIME; NATURAL RESOURCES; \*OUTDOOR EDUCATION; \*RECREATIONAL ACTIVITIES; RECREATIONAL PROGRAMS

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

DESCRIPTIVE NOTE: 47P.; BEST COPY AVAILABLE; OCCASIONAL MARGINAL LEGIBILITY

SINCE AN INCREASING NUMBER OF PEOPLE TODAY ARE SPENDING LEISURE TIME IN THE OUT-OF-DOORS, THERE IS A NEED TO DEVELOP SOCIETY'S AWARENESS AND UNDERSTANDING OF THE ENVIRONMENT, DEVELOP OUTDOOR SKILLS, AND STRESS FACTORS IN OUTDOOR ACTIVITY PARTICIPATION. THIS UNIT IS DESIGNED TO PROVIDE ENOUGH INFORMATION AND SKILL DEVELOPMENT TO ENABLE EDUCABLE MENTALLY RETARDED STUDENTS AT THE INTERMEDIATE AND JUNIOR HIGH LEVEL TO SUCCESSFULLY PARTICIPATE IN SOME OF THE POPULAR OUTDOOR ACTIVITIES. EIGHT TOPICS ARE INCLUDED AS FOLLOWS: BOATING, RIFLERY (BB GUNS), FIRE BUILDING, FISHING, ARCHERY, MICROSCOPE ACTIVITIES FOCUSING ON NATURE STUDIES, TENTING AND OUTDOOR LAB SESSIONS. THERE IS A SUGGESTED UNIT TIME LINE FOR EACH TOPIC WITH CULMINATING WORK INVOLVING FIELD EXPERIENCE. SPECIFIC SCHEDULES ARE INCLUDED IN EACH TOPIC AREA AND APPENDICES PROVIDE RELEVANT BACKGROUND INFORMATION, DIAGRAMS AND APPROPRIATE TECHNIQUES. (MLB)

ACCESSION NUMBER: ED097279

PUBLICATION DATE: 72

TITLE: SHORT-STAY RESIDENTIAL EXPERIENCE: RESIDENTIAL WORK BY SECONDARY SCHOOL PUPILS.

DESCRIPTOR: BOARDING SCHOOLS; \*COMPARATIVE EDUCATION;  
 \*EDUCATIONAL INNOVATION; EDUCATIONAL OBJECTIVES; EDUCATIONAL PLANNING; \*FIELD EXPERIENCE PROGRAMS; LEISURE TIME; OUTDOOR EDUCATION; RELEVANCE (EDUCATION); \*RESIDENTIAL CENTERS;  
 \*RESIDENTIAL PROGRAMS; SECONDARY EDUCATION

IDENTIFIER: \*GREAT BRITAIN

DESCRIPTIVE NOTE: 59P.

MOST SECONDARY SCHOOLS IN GREAT BRITAIN TODAY HAVE IMPLEMENTED RESIDENTIAL COURSES. THEY HAVE BUILT, BOUGHT, OR ADAPTED PREMISES RANGING FROM DERELICT COLLEGES TO COUNTRY HOUSES FOR USE AS RESIDENTIAL CENTERS WHERE STUDENTS MAY SPEND FROM A FEW DAYS TO SEVERAL WEEKS STUDYING, WORKING, OR LEARNING TO USE LEISURE TIME. THIS PUBLICATION EXAMINES SEVERAL ASPECTS OF RESIDENTIAL EXPERIENCE: (1) WHAT IS CONTRIBUTES TO THE EDUCATION OF CHILDREN WHICH COULD NOT BE DONE ON A DAY BASIS FROM SCHOOL, (2) THE OBJECTIVES OF RESIDENTIAL WORK, AND (3) PLANNING NECESSARY TO ACHIEVE THE OBJECTIVES. TOPICS DISCUSSED INCLUDE HOW GIRLS EXPERIENCED HOTEL LIFE IN LONDON, FIELD STUDIES IN ENGLISH, A HOUSECRAFT COURSE, EDUCATION FOR AND THROUGH A LEISURE COURSE, AN OUTDOOR PURSUITS CENTRE, AND OTHER EXAMPLES OF RESIDENTIAL WORK. AMONG EXAMPLES OF SINGLE-SCHOOL STRATEGIES PRESENTED ARE HOW A TOWN SCHOOL CONVERTS A RURAL RAILWAY STATION INTO A RESIDENTIAL CENTRE, AND AN OUTDOOR ACTIVITIES WEEK.  
 (AUTHOR/RM)

AVAILABILITY: COPIES AVAILABLE FREE, WHILE SUPPLIES LAST, ON APPLICATION TO THE CENTRAL DESPATCH SECTION, SCHOOLS COUNCIL, 160 GREAT PORTLAND STREET, LONDON W1N 6LL

ACCESSION NUMBER: ED099148

PUBLICATION DATE: 71

TITLE: ENVIRONMENTAL OUTDOOR LABORATORY SCHOOL.

DESCRIPTOR: CAMPING; ELEMENTARY EDUCATION; \*GRADE 5;  
LABORATORY TRAINING; \*LEARNING LABORATORIES; MATHEMATICS  
INSTRUCTION; NATURE CENTERS; \*OUTDOOR EDUCATION; \*PROGRAM  
EVALUATION; SCIENCE TEACHING CENTERS; SOCIAL STUDIES; \*URBAN  
YOUTH

IDENTIFIER: \*DISTRICT OF COLUMBIA PUBLIC SCHOOLS

DESCRIPTIVE NOTE: 62P.

JANUARY 31 TO MAY 28, 1971, 44 5TH GRADE CLASSES AND TEACHERS FROM THE WASHINGTON, D.C. PUBLIC SCHOOLS VISITED THE ENVIRONMENTAL OUTDOOR LABORATORY SCHOOL, CATOCTIN MOUNTAIN NATIONAL PARK, THURMONT, MARYLAND. THE SCHOOL PROVIDED: (1) SPECIALIZED TRAINING IN READING AND RELATED COMMUNICATION SKILLS; (2) OPPORTUNITIES FOR GROWTH IN SOCIALIZATION THROUGH RESIDENT EXPERIENCES; (3) RECREATIONAL EXPERIENCES AVAILABLE ONLY IN AN OUTDOOR CAMP SETTING; AND (4) UTILIZATION OF MATHEMATICS, SCIENCE, AND SOCIAL STUDIES IN ON-SITE EXPERIENCES TO EXTEND AND CLARIFY CLASSROOM EXPERIENCES. A SURVEY WAS CONDUCTED TO ASSESS THE PROJECT'S EFFECTIVENESS AND DETERMINE THE IMPORTANCE OF SUCH A PROJECT ON URBAN STUDENTS. INTERVIEWS AND QUESTIONNAIRES WERE USED TO GATHER DATA FROM THE STAFF, VISITING TEACHERS, PARENTS, AND STUDENTS. PRE-POST ATTITUDE AND KNOWLEDGE QUESTIONNAIRES WERE ADMINISTERED TO STUDENTS DURING THE PROGRAM'S FIRST, FIFTH, AND EIGHTH WEEKS. SOME FINDINGS WERE: (1) POSITIVE RESULTS EXISTED ON BOTH STUDENTS' ATTITUDES AND KNOWLEDGE INVENTORIES; (2) THERE WAS AN OVERALL GAIN IN KNOWLEDGE IN MATHEMATICS, SCIENCE, AND VOCABULARY; (3) CAMP STAFF MEMBERS RATED THE TOTAL PROGRAM "EXCELLENT" OR "GOOD"; AND (4) CLASSROOM TEACHERS FELT THE PROGRAM CONTRIBUTED TO THE STUDENTS' SOCIAL GROWTH AS THEY EXPERIENCED THE RESPONSIBILITIES AND SOCIAL INTERCHANGE OF GROUP LIVING. THE REPORT'S APPENDIXES GIVE EXAMPLES OF THE SURVEY INSTRUMENTS USED, A SCHEDULE OF A TYPICAL DAY, AND LISTS OF PARTICIPATING SCHOOLS, PERSONNEL, AND RESIDENT AND VISITING TEACHERS. (NQ)

ACCESSION NUMBER: ED099149

PUBLICATION DATE: APR 74

TITLE: A TEACHER'S GUIDE TO: INDIANS AND THE OUTDOOR CLASSROOM.

PERSONAL AUTHOR: SCHUMACHER, C. M.

DESCRIPTOR: \*AMERICAN INDIANS; BOTANY; DEFINITIONS;  
ECOLOGY; \*ENVIRONMENTAL EDUCATION; \*OUTDOOR EDUCATION;  
\*PLANT IDENTIFICATION; \*TEACHING GUIDES

IDENTIFIER: \*SOUTH DAKOTA

DESCRIPTIVE NOTE: 35P.

AS A BASIC TEACHER'S GUIDE TO THE STUDY OF PLANTS IN THEIR ENVIRONMENT, THIS DOCUMENT SERVES PRIMARILY AS A STARTING POINT FOR OUTDOOR EDUCATION WITH AN AMERICAN INDIAN EMPHASIS IN THE STATE OF SOUTH DAKOTA. THE STATE IS DIVIDED INTO THREE BROAD ENVIRONMENTAL CATEGORIES OR "BIOTIC COMMUNITIES" (PRAIRIE AND PLAINS, WOODLANDS, AND WET PLACES); LISTS OF PLANTS FOUND IN EACH OF THESE BIOTIC COMMUNITIES ARE GROUPED UNDER THE FURTHER CLASSIFICATIONS OF TREES, SHRUBS AND WOODY VINES, FORBS, AND GRASSES. EACH PLANT LISTED IS IDENTIFIED BY BOTH COMMON AND SCIENTIFIC NAMES; DETAILED ANNOTATIONS FOLLOWING EACH DEFINITION EMPHASIZE THE AMERICAN INDIAN USAGE AND/OR KNOWLEDGE OF THE PLANT DESCRIBED. AN INDEX IS PROVIDED. (JC)

ACCESSION NUMBER: ED099162

PUBLICATION DATE: 74

TITLE: THE EFFECTS OF OUTWARD BOUND PARTICIPATION UPON ANXIETY AND SELF CONCEPT.

PERSONAL AUTHOR: KOEPKE, SHARON M.

DESCRIPTOR: \*ANXIETY; \*FEMALES; FIELD TRIPS; HIGHER EDUCATION; LEARNING EXPERIENCE; \*MALES; \*OUTDOOR EDUCATION; SELF ACTUALIZATION; \*SELF CONCEPT

IDENTIFIER: COLORADO; \*OUTWARD BOUND

DESCRIPTIVE NOTE: 9P.; PAPER PRESENTED AT THE ANNUAL MEETING OF THE NATIONAL ASSOCIATION OF HEALTH, PHYSICAL EDUCATION, AND RECREATION (SPRING 1974)

DETERMINED WERE THE EFFECTS OF THE OUTWARD BOUND EXPERIENCE ON THE ANXIETY LEVELS AND SELF-CONCEPTS OF 33 MALE AND 11 FEMALE PARTICIPANTS IN A COLORADO OUTWARD BOUND SCHOOL COURSE HELD IN MAY 1973. PARTICIPANTS RANGED FROM 16 TO 38 YEARS OLD, WITH THE MAJORITY IN THE COLLEGE AGE BRACKET. THE COURSE CONSISTED OF 23 DAYS OF INTENSIVE WILDERNESS EXPERIENCE IN THE SAN JUAN MOUNTAINS OF SOUTHWEST COLORADO. PRE- AND POST-COURSE TESTS WERE ADMINISTERED. REAL AND IDEAL SELF-CONCEPTS WERE MEASURED THROUGH GOUGH ADJECTIVE CHECK LISTS. STATE AND TRAIT ANXIETIES WERE INDEXED BY THE STATE-TRAIT ANXIETY INVENTORY. THE COMPARISON OF PRE- AND POST-COURSE TESTS REVEALED THAT AT THE CONCLUSION OF THE EXPERIENCE REAL SELF-CONCEPTS BECAME MORE POSITIVE AND MORE CLOSELY APPROACHED IDEAL SELF-CONCEPTS. BOTH STATE AND TRAIT ANXIETIES DECREASED FOLLOWING PARTICIPATION. LOW STATE AND TRAIT ANXIETY SCORES WERE FOUND TO BE RELATED TO POSITIVE REAL SELF-CONCEPT MEASURES. FEMALES EXHIBITED HIGHER IDEAL SELF-CONCEPTS WHILE MALES DISPLAYED A SMALLER DISCREPANCY BETWEEN REAL AND IDEAL SELVES. BECAUSE THE DIRECTION OF ALL CHANGES WAS THE SAME FOR BOTH SEXES, IT WAS CONCLUDED THAT OUTWARD BOUND PARTICIPATION HAD SIMILAR EFFECTS ON MALE AND FEMALE STATE ANXIETY, TRAIT ANXIETY, REAL SELF-CONCEPT, AND IDEAL SELF-CONCEPT. (AUTHOR/NQ)

ACCESSION NUMBER: ED099182

PUBLICATION DATE: 10 AUG 71

TITLE: AN APPROACH TO THE TEACHING OF ENVIRONMENTAL SCIENCE.

PERSONAL AUTHOR: GREENWELL, ROBERT; AND OTHERS

DESCRIPTOR: CONSERVATION EDUCATION; \*CURRICULUM GUIDES;  
\*ENVIRONMENTAL EDUCATION; GRADE 9; GRADE 10; INSTRUCTIONAL  
MATERIALS; LEARNING ACTIVITIES; \*NATURAL RESOURCES; OUTDOOR  
EDUCATION; \*SCIENCE EDUCATION; \*SECONDARY EDUCATION

DESCRIPTIVE NOTE: 39P.; MARGINAL LEGIBILITY

THIS GUIDE IS DESIGNED TO ASSIST EDUCATORS IN DEVELOPING AN ENVIRONMENTAL EDUCATION PROGRAM FOR USE IN THE NINTH AND TENTH GRADES. THE PROGRAM GUIDELINES FOCUS ON THE POTENTIAL DROPOUT, ENCOURAGING THE STUDENT TO CONTINUE HIS EDUCATION, BUT ALSO EXPOSING HIM TO ENVIRONMENTAL UNDERSTANDINGS THAT CONTRIBUTE TO POSITIVE ENVIRONMENTAL ACTION THROUGHOUT ONE'S LIFE. THE GUIDE IS STRUCTURED AROUND THE FOLLOWING TWO OBJECTIVES: THE DEVELOPMENT OF A CONTRIBUTING, SELF-SUFFICIENT, RESPONSIBLE STUDENT, AND THE DEVELOPMENT OF AN ENVIRONMENTALLY AWARE CITIZEN. THE NINTH-GRADE PROGRAM IS DIVIDED INTO FOUR SECTIONS—LAND, PLANTS, WATER, AND AIR. EACH SECTION CONTAINS BEHAVIORAL OBJECTIVES, A PROGRAM DESIGN, AND EVALUATION STRATEGIES WHICH EXAMINE BOTH COGNITIVE AND AFFECTIVE OUTCOMES. SUGGESTED ACTIVITIES ARE INCLUDED. THE TENTH-GRADE PROGRAM IS ALSO DIVIDED INTO FOUR SECTIONS—NATURAL RESOURCES, SOCIETAL FORCES FOR A BETTER ENVIRONMENT, ENVIRONMENTAL PROBLEMS, AND YOUR ROLE IN THE ENVIRONMENT. EACH SECTION CONTAINS BEHAVIORAL OBJECTIVES. A BIBLIOGRAPHY INCLUDING REFERENCE BOOKS FOR TEACHER AND STUDENT USE, INFORMATION SOURCES, FILMSTRIPS, AND FILMS CONCLUDES THE GUIDE. (TK)

AVAILABILITY: ERIC/SMEAC, THE OHIO STATE UNIVERSITY, 400 LINCOLN TOWER, COLUMBUS, OH 43210 (ON LOAN)

ACCESSION NUMBER: ED099183

PUBLICATION DATE: JUL 73

TITLE: IMPACT OF ENVIRONMENTAL EDUCATION FOR GUAM SCHOOLS,  
AN EVALUATION.

PERSONAL AUTHOR: KALLINGAL, ANTHONY

DESCRIPTOR: \*CONSERVATION EDUCATION; \*EDUCATIONAL PROGRAMS;  
\*ENVIRONMENT; ENVIRONMENTAL EDUCATION; \*NATURAL RESOURCES;  
OUTDOOR EDUCATION; \*SCIENCE EDUCATION; SCIENCE PROGRAMS

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III;  
ESEA TITLE III; \*GUAM

DESCRIPTIVE NOTE: 90P.; A RELATED DOCUMENT IS ED 099 222

THE 1972 ENVIRONMENTAL EDUCATION FOR GUAM SCHOOLS PROJECT ORIGINATED FROM THE RECOGNITION OF A NEED FOR ENVIRONMENTAL EDUCATION ON THE ISLAND. THE ULTIMATE GOAL WAS TO GRADUATE CITIZENS WHO WERE KNOWLEDGEABLE AND CONSCIENTIOUS ABOUT ENVIRONMENTAL CONCERNS. THIS REPORT DESCRIBES AND ASSESSES THE IMPACT OF THIS PROJECT ON GUAM AND PROVIDES A SOURCE OF FEEDBACK, A SOURCE OF SUGGESTIONS FOR FURTHER IMPROVEMENT, AND A VEHICLE FOR DISSEMINATION OF INFORMATION. THE REPORT CONTAINS THREE CATEGORIES OF DATA—CONTEXTUAL DATA, PROGRAM DATA, AND EVALUATION DATA. CONTEXTUAL DATA CONCERN THE ECONOMIC AND DEMOGRAPHIC FACTORS OF THE LOCALE AND ORGANIZATIONAL AND FINANCIAL PROBLEMS OF THE SCHOOL SYSTEM. PROGRAM DATA PROVIDE INFORMATION ON PERSONNEL, PROCEDURES, EQUIPMENT, TRAINING, COMMUNITY INVOLVEMENT, AND EXPENDITURES. THE EVALUATION DATA FOCUS ON THE BEHAVIORAL OBJECTIVES AND GOALS, AND INSTRUMENTS FOR MEASURING THEM. THE FINAL SECTION, CONCLUSION AND RECOMMENDATIONS, NOTES THAT THE STUDENTS IN PILOT SCHOOLS DEVELOPED AN AWARENESS OF THE NEED FOR, AND INTEREST IN, PRESERVING THE ENVIRONMENT. AN OVERVIEW OF THE CURRICULUM ADAPTATIONS, AND A SAMPLE TEACHER EVALUATION SHEET ARE INCLUDED IN THE APPENDICES.  
(AUTHOR/TK)

ACCESSION NUMBER: ED099197

PUBLICATION DATE: 73

TITLE: A COMPARATIVE STUDY OF SCIENCE ACADEMIC ACHIEVEMENT OF SENIOR HIGH SCHOOL PARTICIPANTS AND NON-PARTICIPANTS IN AN OUTDOOR EDUCATIONAL CENTER - ST. MARTIN PARISH.

PERSONAL AUTHOR: DEBLANC, JEFFERSON JOSEPH

DESCRIPTOR: ACHIEVEMENT; DOCTORAL THESES; EDUCATIONAL RESEARCH; \*ENVIRONMENTAL EDUCATION; \*INQUIRY TRAINING; INSTRUCTION; LEARNING; \*OUTDOOR EDUCATION; \*SECONDARY SCHOOL SCIENCE; SECONDARY SCHOOL STUDENTS

IDENTIFIER: \*RESEARCH REPORTS

DESCRIPTIVE NOTE: 167P.; ED.D. DISSERTATION, MCNEESE STATE UNIVERSITY

THIS STUDY HAS AS ITS FOCUS THE SCIENCE ACADEMIC MEAN PERFORMANCE DIFFERENCES BETWEEN SENIOR HIGH SCHOOL PUPILS WHO HAVE TAKEN PART IN AN OUTDOOR EDUCATIONAL CENTER AND THOSE SENIOR HIGH SCHOOL PUPILS WHO HAVE NOT. AN ATTEMPT WAS MADE TO ASSOCIATE THESE DIFFERENCES WITH PUPIL PARTICIPATION IN AN OUTDOOR EDUCATIONAL CENTER'S OFFERINGS. A GROUP OF 285 SENIOR HIGH SCHOOL SCIENCE PUPILS WAS CONSIDERED AS THE EXPERIMENTAL GROUP. ANOTHER GROUP OF 194 SENIOR HIGH SCHOOL SCIENCE PUPILS FROM A DIFFERENT SCHOOL WAS USED AS THE CONTROL GROUP. THE TWO GROUPS WERE PRETESTED AND POSTTESTED WITH THE SAME INSTRUMENT. THE TREATMENT WAS 12 SHORT SCIENCE COURSES OFFERED AN OUTDOOR EDUCATIONAL CENTER. THE RESULTS INDICATED THAT STUDENTS HAVING OUTDOOR EDUCATION ACHIEVED A SIGNIFICANT GAIN OVER SCIENCE PUPILS NOT EXPOSED TO THESE PROGRAMS; WHITES APPEAR TO GAIN MORE IN TERMS OF SCIENCE ACHIEVEMENT THAN NON-WHITES WHEN INVOLVED IN OUTDOOR EDUCATION. FINALLY, BASED ON THE FINDINGS, MORE CONSIDERATION SHOULD BE GIVEN TO THE INQUIRY ROLE APPROACH AS A METHODOLOGY FOR SCIENCE INSTRUCTIONAL CONCEPTS. SUCH AN APPROACH PRESENTED IN AN OUTDOOR EDUCATIONAL ENVIRONMENT SEEMS TO PRODUCE MORE STUDENT INVOLVEMENT AND CONTRIBUTE TO ACADEMIC GAINS AMONG BELOW AVERAGE SCIENCE PUPILS. (BRT)

AVAILABILITY: UNIVERSITY MICROFILMS, 300 NORTH ZEEB ROAD, ANN ARBOR, MICHIGAN 48106 (ORDER NO. 73-30,233, MF-\$5.00, XEROGRAPHY-\$11.00)

ACCESSION NUMBER: ED099198

PUBLICATION DATE: 73

TITLE: ENVIRONMENTAL EDUCATION AND YOUR SCHOOL SITE.

PERSONAL AUTHOR: WERLING, DONN PAUL

DESCRIPTOR: COMMUNITY INVOLVEMENT; CONSERVATION EDUCATION; ELEMENTARY GRADES; \*ENVIRONMENTAL EDUCATION; \*GUIDES; \*LAND USE; NATURAL RESOURCES; \*OUTDOOR EDUCATION; SCIENCE EDUCATION; \*SITE DEVELOPMENT

DESCRIPTIVE NOTE: 100P.

THIS HANDBOOK, DESIGNED PRIMARILY FOR USE IN THE DEVELOPMENT OF EXISTING ELEMENTARY SCHOOL SITES, HAS THE OVERALL OBJECTIVE OF DEFINING A PROCESS APPROACH TO THE DEVELOPMENT OF A SCHOOL SITE FOR USE IN ENVIRONMENTAL EDUCATION. THIS APPROACH INVOLVES THE STUDENT BODY, SCHOOL PERSONNEL, AND THE COMMUNITY IN THE PLANNING, DEVELOPMENT AND USE OF THE SCHOOL SITE AS A GREEN ISLAND FOR SCHOOL AND COMMUNITY USE. SPECIFIC OBJECTIVES OF THE HANDBOOK ARE: (1) TO ESTABLISH A RATIONALE FOR DEVELOPING SCHOOL SITES FOR USE IN ENVIRONMENTAL EDUCATION: ECOLOGICAL, INSTRUCTIONAL, ECONOMIC, AND COMMUNITY BENEFITS; (2) TO PROVIDE GUIDELINES FOR ORGANIZING A SCHOOL SITE DEVELOPMENT EFFORT; (3) TO POINT OUT PITFALLS ONE MAY ENCOUNTER IN SITE DEVELOPMENT EFFORTS; (4) TO PROVIDE STRATEGIES, IDEAS, AND TECHNIQUES FOR TEACHERS TO USE IN ORDER TO DRAW THE MOST INSTRUCTIONAL BENEFIT FROM THE DEVELOPMENT AND USE OF THE SCHOOL SITE; (5) TO POINT OUT WAYS TO ACHIEVE THE MAXIMUM NUMBER OF SPIN-OFF BENEFITS FROM THE DEVELOPMENT OF THE SITE; AND (6) TO PROVIDE SELECTED REFERENCES TO WRITTEN MATERIALS AND AVAILABLE INSTITUTIONAL AND HUMAN RESOURCES. THIS HANDBOOK IS WRITTEN WITH THE BELIEF THAT ONE MOTIVATED INDIVIDUAL CAN RALLY THE SCHOOL AND COMMUNITY INTEREST AND SUPPORT NECESSARY TO COOPERATIVELY DEVELOP A SCHOOL SITE.  
(AUTHOR/BT)

AVAILABILITY: OPEN LANDS PROJECT, 53 W. JACKSON BLVD., CHICAGO, IL 60604 (\$3.00)

ACCESSION NUMBER: ED099214

PUBLICATION DATE: 73

TITLE: ENVIRONMENTAL ACTIVITIES, JUNIOR HIGH SCHOOL.

PERSONAL AUTHOR: EDWARDS, WILLIAM C.; LARSON, ROBERT J.

DESCRIPTOR: CONSERVATION EDUCATION; \*CURRICULUM GUIDES;  
ECOLOGY; EDUCATIONAL PROGRAMS; \*ENVIRONMENTAL EDUCATION;  
\*INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH;  
\*JUNIOR HIGH SCHOOLS; \*LEARNING ACTIVITIES; LESSON PLANS;  
NATURAL RESOURCES; OUTDOOR EDUCATION; PROGRAM DEVELOPMENT;  
SCIENCE EDUCATION

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III;  
ESEA TITLE III

DESCRIPTIVE NOTE: 94P.

THIS GUIDE, FOR USE AT THE JUNIOR HIGH LEVEL, IS AIMED AT HELPING OUR YOUTH BECOME MORE KNOWLEDGEABLE CONCERNING THE ENVIRONMENT AND ASSOCIATED PROBLEMS, THUS MAKING THEM AWARE OF HOW TO SOLVE THESE PROBLEMS AND MOTIVATING THEM TO WORK TOWARD THEIR SOLUTION. AMONG THE SUBJECTS DISCUSSED ARE ART IN NATURE, EROSION, BODY POLLUTION, WATER POLLUTION, FINDING EDIBLE PLANTS FOR FOOD, OUTDOOR COOKING, NOISE POLLUTION, TELEVISION AND THE ECOLOGY IMAGE, CEMETERIES, WATERSHEDS, RECYCLING, NATURAL DYES, AND AESTHETICS. EACH LEARNING ACTIVITY INCLUDES BEHAVIORAL OBJECTIVES, DIRECTIONS TO THE TEACHER AND STUDENTS, MATERIALS NEEDED, REFERENCES, AND A LISTING OF RELATED AUDIOVISUAL MATERIALS. THIS GUIDE IS DESIGNED TO HELP TEACHERS EFFECTIVELY IMPLEMENT ENVIRONMENTAL EDUCATION INTO THE CLASSROOM. (BT)

ACCESSION NUMBER: ED099216

PUBLICATION DATE: 73

TITLE: A MULTIDISCIPLINARY PROCESS CURRICULUM IN ENVIRONMENTAL EDUCATION, GRADE 1.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*CURRICULUM GUIDES; \*ELEMENTARY EDUCATION; \*ENVIRONMENTAL EDUCATION; FIELD TRIPS; GRADE 1; INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; OUTDOOR EDUCATION; PRIMARY EDUCATION; \*SCIENCE EDUCATION; TEACHING GUIDES

DESCRIPTIVE NOTE: 135P.

THIS FIRST GRADE CURRICULUM GUIDE IS BASED ON A MULTIDISCIPLINARY APPROACH TO ENVIRONMENTAL EDUCATION. THE GUIDE INCLUDES ACTIVITIES, GUIDELINES FOR FIELD TRIP PLANNING, AND A RESOURCE SECTION. THE GUIDE DEALS WITH THE SUBJECTS OF ANIMALS, AIR, WATER, AND LITTER. EACH SUBJECT SECTION INCLUDES ACTIVITIES BASED ON THE PHYSICAL CHARACTERISTICS, MAN'S USE, AND MAN'S MISUSE OF THE SUBJECT. THESE ACTIVITIES MAY BE USED INDIVIDUALLY OR IN SEQUENCE, AND AIM TO PROMOTE THE DEVELOPMENT OF POSITIVE ATTITUDES TOWARD THE ENVIRONMENT. EACH ACTIVITY LESSON PROVIDES THE TEACHER WITH OBJECTIVES, TEACHER BACKGROUND INFORMATION, A MATERIALS LIST, A PRACTIVITY, THE ACTIVITY, A POSTACTIVITY, SUPPLEMENTAL ACTIVITIES, AND ILLUSTRATIONS INTENDED FOR COPYING. GUIDELINES FOR CONDUCTING A FIELD TRIP ARE INCLUDED TO FACILITATE THE TEACHER IN TEACHING IN THE OUT-OF-DOORS. THE GUIDELINES COVER PRE-FIELD TRIP, FIELD TRIP, AND POST-FIELD TRIP PLANNING. A RESOURCE SECTION INCLUDES SPEAKERS, FILMS, FREE AND INEXPENSIVE MATERIALS, PAMPHLETS, AND CONSERVATION AND ENVIRONMENTAL GROUPS WHICH MAY BE CONTACTED FOR INFORMATION ON ENVIRONMENTAL TOPICS. (TK)

ACCESSION NUMBER: ED099217

PUBLICATION DATE: 73

TITLE: A MULTIDISCIPLINARY PROCESS CURRICULUM IN ENVIRONMENTAL EDUCATION, GRADE 2.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*CURRICULUM GUIDES; \*ELEMENTARY EDUCATION; \*ENVIRONMENTAL EDUCATION; FIELD TRIPS; GRADE 2; INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR EDUCATION; \*SCIENCE EDUCATION; TEACHING GUIDES

DESCRIPTIVE NOTE: 147P.

THIS SECOND GRADE CURRICULUM GUIDE IS BASED ON A MULTIDISCIPLINARY APPROACH TO ENVIRONMENTAL EDUCATION. THE GUIDE INCLUDES ACTIVITIES, GUIDELINES FOR FIELD TRIP PLANNING, AND A RESOURCE SECTION. THE GUIDE DEALS WITH THE SUBJECTS OF PLANTS, SOIL, AND LITTER. EACH SUBJECT SECTION INCLUDES ACTIVITIES BASED ON THE PHYSICAL CHARACTERISTICS, MAN'S USE, AND MAN'S MISUSE OF THE SUBJECT. ACTIVITIES MAY BE USED INDIVIDUALLY OR IN SEQUENCE, AND AIM TO PROMOTE THE DEVELOPMENT OF POSITIVE ATTITUDES TOWARD THE ENVIRONMENT. EACH ACTIVITY PROVIDES THE TEACHER WITH OBJECTIVES, TEACHER BACKGROUND INFORMATION, A MATERIALS LIST, A PREACTIVITY, THE ACTIVITY, A POSTACTIVITY, SUPPLEMENTAL ACTIVITIES, AND ILLUSTRATIONS INTENDED FOR COPYING. GUIDELINES FOR CONDUCTING A FIELD TRIP ARE INCLUDED TO FACILITATE THE TEACHER IN TEACHING IN THE OUT-OF-DOORS. THE GUIDELINES COVER PRE-FIELD TRIP, FIELD TRIP, AND POST-FIELD TRIP PLANNING. A RESOURCE SECTION INCLUDES SPEAKERS, FILMS, FREE AND INEXPENSIVE MATERIALS, PAMPHLETS, AND CONSERVATION AND ENVIRONMENTAL GROUPS WHICH MAY BE CONTACTED FOR INFORMATION ON ENVIRONMENTAL TOPICS. (TK)

ACCESSION NUMBER: ED099218

PUBLICATION DATE: 73

TITLE: A MULTIDISCIPLINARY PROCESS CURRICULUM IN ENVIRONMENTAL EDUCATION, GRADE 3.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*CURRICULUM GUIDES; \*ELEMENTARY EDUCATION; \*ENVIRONMENTAL EDUCATION; FIELD TRIPS; GRADE 3; INSTRUCTIONAL MATERIALS; OUTDOOR EDUCATION; PRIMARY EDUCATION; \*SCIENCE EDUCATION; TEACHING GUIDES

DESCRIPTIVE NOTE: 111P.

THIS ENVIRONMENTAL CURRICULUM GUIDE IS DESIGNED FOR TEACHER USE IN THE THIRD GRADE. A COLLECTION OF MULTIDISCIPLINARY ACTIVITIES, GUIDELINES FOR CONDUCTING FIELD TRIPS, AND A RESOURCE SECTION ARE INCLUDED. THE ACTIVITIES ARE ORGANIZED WITHIN THREE CATEGORIES—AWARENESS, MAN'S USE, AND PROBLEM SOLVING. THEY ARE DESIGNED TO PROVIDE THE STUDENT WITH OPPORTUNITIES TO MAKE OBSERVATIONS, COLLECT AND RECORD DATA, INTERPRET THE DATA, AND SUMMARIZE. THE USE OF THESE ACTIVITIES, EITHER INDIVIDUALLY OR IN SEQUENCE, AIMS TO ESTABLISH A CLIMATE OF PUPIL PARTICIPATION, DISCUSSION, AND INTERACTION. EACH ACTIVITY IS CLASSIFIED BY TOPIC, SUBJECT, COMPLETION TIME, AND GRADE LEVEL. ALL ACTIVITIES INCLUDE: OBJECTIVES, A MATERIALS LIST, TEACHER BACKGROUND INFORMATION, A PREAMACTIVITY, THE ACTIVITY, A POSTACTIVITY, AND ADDITIONAL ACTIVITIES. GUIDELINES FOR CONDUCTING A FIELD TRIP ARE INCLUDED TO FACILITATE THE TEACHER IN TEACHING HER STUDENTS IN THE OUT-OF-DOORS. THE GUIDELINES COVER PRE-FIELD TRIP, FIELD TRIP, AND POST-FIELD TRIP PLANNING. THE RESOURCE SECTION LISTS SPEAKERS, FILMS, FREE AND INEXPENSIVE MATERIALS, PAMPHLETS, AND CONSERVATION AND ENVIRONMENTAL GROUPS WHICH MAY BE CONTACTED FOR INFORMATION ABOUT ENVIRONMENTAL TOPICS. (TK)

ACCESSION NUMBER: ED099219

PUBLICATION DATE: 73

TITLE: A MULTIDISCIPLINARY PROCESS CURRICULUM IN ENVIRONMENTAL EDUCATION, GRADE 4.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*CURRICULUM GUIDES; \*ELEMENTARY EDUCATION; \*ENVIRONMENTAL EDUCATION; FIELD TRIPS; GRADE 4; INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR EDUCATION; \*SCIENCE EDUCATION; TEACHING GUIDES

DESCRIPTIVE NOTE: 118P.

THIS ENVIRONMENTAL EDUCATION CURRICULUM GUIDE IS DESIGNED FOR TEACHER USE IN THE FOURTH GRADE. A COLLECTION OF MULTIDISCIPLINARY ACTIVITIES, GUIDELINES FOR CONDUCTING FIELD TRIPS, AND A RESOURCE SECTION ARE INCLUDED. THE ACTIVITIES ARE ORGANIZED WITHIN THREE CATEGORIES—AWARENESS, MAN'S USE, AND PROBLEM SOLVING. THEY ARE DESIGNED TO PROVIDE THE STUDENT WITH OPPORTUNITIES TO MAKE OBSERVATIONS, COLLECT AND RECORD DATA, INTERPRET THE DATA, AND SUMMARIZE. THE USE OF THESE ACTIVITIES, EITHER INDIVIDUALLY OR IN SEQUENCE, AIMS TO ESTABLISH A CLIMATE OF PUPIL PARTICIPATION, DISCUSSION, AND INTERACTION. EACH ACTIVITY IS CLASSIFIED BY TOPIC, SUBJECT, COMPLETION TIME, AND GRADE LEVEL. ALL ACTIVITIES INCLUDE: OBJECTIVES, A MATERIALS LIST, TEACHER BACKGROUND INFORMATION, A PREACTIVITY, THE ACTIVITY, A POSTACTIVITY, AND ADDITIONAL ACTIVITIES. GUIDELINES FOR CONDUCTING A FIELD TRIP ARE INCLUDED TO FACILITATE THE TEACHER IN TEACHING HER STUDENTS IN THE OUT-OF-DOORS. THE GUIDELINES COVER PRE-FIELD TRIP, FIELD TRIP, AND POST-FIELD TRIP PLANNING. THE RESOURCE SECTION LISTS SPEAKERS, FILMS, FREE AND INEXPENSIVE MATERIALS, PAMPHLETS, AND CONSERVATION AND ENVIRONMENTAL GROUPS WHICH MAY BE CONTACTED FOR INFORMATION ABOUT ENVIRONMENTAL TOPICS. (TK)

ACCESSION NUMBER: ED099220

PUBLICATION DATE: 73

TITLE: A MULTIDISCIPLINARY PROCESS CURRICULUM IN ENVIRONMENTAL EDUCATION, GRADE 5.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*CURRICULUM GUIDES; \*ELEMENTARY EDUCATION; \*ENVIRONMENTAL EDUCATION; FIELD TRIPS; GRADE 5; INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR EDUCATION; \*SCIENCE EDUCATION; TEACHING GUIDES

DESCRIPTIVE NOTE: 144P.

THIS ENVIRONMENTAL CURRICULUM GUIDE IS DESIGNED FOR TEACHER USE IN THE FIFTH GRADE. A COLLECTION OF MULTIDISCIPLINARY ACTIVITIES, GUIDELINES FOR CONDUCTING FIELD TRIPS, AND A RESOURCE SECTION ARE INCLUDED. THE ACTIVITIES ARE ORGANIZED WITHIN THREE CATEGORIES—AWARENESS, MAN'S USE, AND PROBLEM SOLVING. THEY ARE DESIGNED TO PROVIDE THE STUDENT WITH OPPORTUNITIES TO MAKE OBSERVATIONS, COLLECT AND RECORD DATA, INTERPRET THE DATA, AND SUMMARIZE. THE USE OF THESE ACTIVITIES, EITHER INDIVIDUALLY OR IN SEQUENCE, AIMS TO ESTABLISH A CLIMATE OF PUPIL PARTICIPATION, DISCUSSION, AND INTERACTION. EACH ACTIVITY IS CLASSIFIED BY TOPIC, SUBJECT, COMPLETION TIME, AND GRADE LEVEL. ALL ACTIVITIES INCLUDE: OBJECTIVES, A MATERIALS LIST, TEACHER BACKGROUND INFORMATION, A PRACTIVITY, THE ACTIVITY, A POST ACTIVITY, AND ADDITIONAL ACTIVITIES. GUIDELINES FOR CONDUCTING A FIELD TRIP ARE INCLUDED TO FACILITATE THE TEACHER IN TEACHING HER STUDENTS IN THE OUT-OF-DOORS. THE GUIDELINES COVER PRE-FIELD TRIP, FIELD TRIP, AND POST-FIELD TRIP PLANNING. THE RESOURCE SECTION LISTS SPEAKERS, FILMS, FREE AND INEXPENSIVE MATERIALS, PAMPHLETS, AND CONSERVATION AND ENVIRONMENTAL GROUPS WHICH MAY BE CONTACTED FOR INFORMATION ABOUT ENVIRONMENTAL TOPICS. (TK)

ACCESSION NUMBER: ED099221

PUBLICATION DATE: 73

TITLE: A MULTIDISCIPLINARY PROCESS CURRICULUM IN ENVIRONMENTAL EDUCATION, GRADE 6.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*CURRICULUM GUIDES; \*ELEMENTARY EDUCATION; \*ENVIRONMENTAL EDUCATION; FIELD TRIPS; GRADE 6; INSTRUCTIONAL MATERIALS; NATURAL RESOURCES; OUTDOOR EDUCATION; \*SCIENCE EDUCATION; TEACHING GUIDES

DESCRIPTIVE NOTE: 157P.

THIS ENVIRONMENTAL CURRICULUM GUIDE IS DESIGNED FOR TEACHER USE IN THE SIXTH GRADE. A COLLECTION OF MULTIDISCIPLINARY ACTIVITIES, GUIDELINES FOR CONDUCTING FIELD TRIPS, AND A RESOURCE SECTION ARE INCLUDED. THE ACTIVITIES ARE ORGANIZED WITHIN THREE CATEGORIES--AWARENESS, MAN'S USE, AND PROBLEM SOLVING. THEY ARE DESIGNED TO PROVIDE THE STUDENT WITH OPPORTUNITIES TO MAKE OBSERVATIONS, COLLECT AND RECORD DATA, INTERPRET THE DATA, AND SUMMARIZE. THE USE OF THESE ACTIVITIES, EITHER INDIVIDUALLY OR IN SEQUENCE, AIMS TO ESTABLISH A CLIMATE OF PUPIL PARTICIPATION, DISCUSSION, AND INTERACTION. EACH ACTIVITY IS CLASSIFIED BY TOPIC, SUBJECT, COMPLETION TIME, AND GRADE LEVEL. ALL ACTIVITIES INCLUDE: OBJECTIVES, A MATERIALS LIST, TEACHER BACKGROUND INFORMATION, A PRACTIVITY, THE ACTIVITY, A POSTACTIVITY, AND ADDITIONAL ACTIVITIES. GUIDELINES FOR CONDUCTING FIELD TRIPS ARE INCLUDED TO FACILITATE THE TEACHER IN TEACHING HER STUDENTS IN THE OUT-OF-DOORS. THE GUIDELINES COVER PRE-FIELD TRIP, FIELD TRIP, AND POST-FIELD TRIP PLANNING. THE RESOURCE SECTION LISTS SPEAKERS, FILMS, FREE AND INEXPENSIVE MATERIALS, PAMPHLETS, AND CONSERVATION AND ENVIRONMENTAL GROUPS WHICH MAY BE CONTACTED FOR INFORMATION ABOUT ENVIRONMENTAL TOPICS. (TK)

ACCESSION NUMBER: ED099228

PUBLICATION DATE: 74

TITLE: A MANUAL FOR A VOLUNTEER FIELD AIDE PROGRAM.

PERSONAL AUTHOR: QUINN, ALLIE

DESCRIPTOR: CONSERVATION EDUCATION; \*CURRICULUM GUIDES; EDUCATIONAL RESOURCES; ENVIRONMENT; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR EDUCATION; \*SCHOOL AIDES; \*TEACHER AIDES; \*TEACHING GUIDES

DESCRIPTIVE NOTE: 68P.

THIS GUIDE PRESENTS A CURRICULUM FOR A VOLUNTEER FIELD AIDE PROGRAM. THE GUIDE IS BASED ON A PROGRAM THAT WAS CONDUCTED IN NEW HAMPSHIRE THAT TRAINED VOLUNTEERS TO ASSIST TEACHERS IN OUTDOOR ENVIRONMENTAL EDUCATION VENTURES. IT WAS FOUND THAT THE AIDES HELPED TEACHERS TO EXPAND THEIR EXISTING PROGRAMS BY ASSISTING IN SUPERVISION, RESEARCH AND PROGRAM DEVELOPMENT, AND INSTRUCTION. THIS GUIDE PROVIDES A FRAMEWORK FOR OTHER TEACHER GROUPS WISHING TO DEVELOP AN AIDE PROGRAM. THE VOLUNTEER AIDE PROGRAM IS BASED ON 15 SESSIONS OF INTER-DISCIPLINARY ENVIRONMENTAL EDUCATION INSTRUCTION. THESE ACTIVITIES AND CONCEPTS IN THE 15 SESSIONS ARE AIMED AT FAMILIARIZING THE AIDE WITH ECOLOGICAL CONCEPTS, TECHNIQUES FOR FIELD WORK WITH CHILDREN, AND TEACHING APPROACHES STRESSING INQUIRY AND DISCOVERY. THE 15 SESSIONS, WHICH COVER SUCH TOPICS AS THE INQUIRY APPROACH, CLASSIFYING, FIELD AND FOREST COMMUNITIES, COMPASS AND MAPPING SKILLS, AND MATHEMATICS, ARE COVERED IN THE GUIDE. EACH SESSION FOCUSES ON ONE TOPIC AND INCLUDES ACTIVITIES, SUGGESTIONS; REFERENCES, DIAGRAMS, AND ILLUSTRATIONS. SUGGESTIONS FOR ORGANIZING AN AIDE PROGRAM, SAMPLE REGISTRATION FORMS, A BIBLIOGRAPHY AND RESOURCES ARE ALSO INCLUDED. (TK)

AVAILABILITY: REGIONAL CENTER FOR EDUCATIONAL TRAINING,  
WILSON HALL, HANOVER, NH 03755 (\$1.50)

ACCESSION NUMBER: ED099235

PUBLICATION DATE: 74

TITLE: LAND USE UNIT, EDMONDS SCHOOL DISTRICT.

DESCRIPTOR: BIOLOGICAL SCIENCES; CONSERVATION EDUCATION;  
ECOLOGY; EDUCATIONAL PROGRAMS; \*ENVIRONMENTAL EDUCATION;  
GAMES; \*INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH;  
\*LAND USE; \*LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR  
EDUCATION; POPULATION EDUCATION; SCIENCE EDUCATION;  
\*SECONDARY GRADES; SIMULATION

IDENTIFIER: LAND USE PLANNING

DESCRIPTIVE NOTE: 125P.

THIS INTERDISCIPLINARY PROGRAM, DEVELOPED FOR SECONDARY STUDENTS, CONTAINS 18 LAND USE ACTIVITIES THAT CAN EITHER BE USED DIRECTLY IN, OR AS A SUPPLEMENT TO, CURRICULUM IN SCIENCE, BIOLOGY, HORTICULTURE, MATHEMATICS, SOCIAL STUDIES, ENGLISH, INDUSTRIAL ARTS AND PHYSICAL EDUCATION. THE TOPICS TO BE INVESTIGATED INCLUDE: LAND USE SIMULATION GAMES, LAND USE PLANNING AND DECISION MAKING, SMALL AREA PLOTS, LAND USE ALTERNATIVES, MICROCLIMATES, FLOOD MANAGEMENT AND LOCAL POPULATION CONTROL. EACH LEARNING ACTIVITY INCLUDES: SUBJECT AREA AND GRADE LEVEL FOR WHICH IT CAN BE USED, LEVEL VI OBJECTIVES, TIME SCHEDULE FOR PRELAB AND PERFORMANCE OF THE ACTIVITY, BACKGROUND INFORMATION FOR THE TEACHER AND A LISTING OF MATERIALS NEEDED. A LAND USE BIBLIOGRAPHY AND A LISTING OF AUDIO-VISUAL MATERIALS ARE INCLUDED. (BT)

ACCESSION NUMBER: ED099281

PUBLICATION DATE: OCT 74

TITLE: READINGS IN EXPERIENTIAL EDUCATION: A COMPENDIUM OF MODEL PROGRAMS.

PERSONAL AUTHOR: KIMBALL, RICHARD OWEN; RATLIFF, STAN

DESCRIPTOR: ECONOMICALLY DISADVANTAGED; \*EDUCATIONAL ALTERNATIVES; \*EDUCATIONAL INNOVATION; \*EXPERIMENTAL PROGRAMS; HIGHER EDUCATION; \*OUTDOOR EDUCATION; PROGRAM CONTENT; PROGRAM DESCRIPTIONS; SECONDARY EDUCATION; SELF ACTUALIZATION; \*STUDENT EXPERIENCE; UNDERACHIEVERS

DESCRIPTIVE NOTE: 38P.; THE AUTHORS ARE AFFILIATED WITH THE UNIVERSITY OF COLORADO, SCHOOL OF EDUCATION

THIS REPORT DESCRIBES TEN EXPERIENTIAL EDUCATION PROGRAMS LOCATED THROUGHOUT THE UNITED STATES. THE PRINCIPAL OBJECTIVE OF THESE PROGRAMS IS TO IMPROVE THE SELF-IMAGE OF HIGH SCHOOL AND COLLEGE STUDENTS THROUGH A SERIES OF CHALLENGING, ADVENTURESOME, AND SUCCESS-ORIENTED OUTDOOR EXPERIENCES. APPRECIATION OF OUTDOOR SCIENCE EDUCATION, CONSERVATION ISSUES, AN HISTORIC SENSE OF WHAT EARLY SETTLERS FACED, AND AN ATTEMPT TO MAKE SCHOOL EXCITING ALSO RESULT FROM THE PROGRAMS. THISTLEDEW CAMP, TOGO, MINNESOTA; OPERATION BREAKOUT, CEDAR HILL, MISSOURI; DISCOVERY LAND, INC., BRYAN, TEXAS; AND PROJECT APOLLO, MURRAY STATE UNIVERSITY, MURRAY, KENTUCKY ENROLL THE POOR AND THE UNDERACHIEVER. THE EAST HIGH SCHOOL SEMINAR, DENVER, COLORADO, TARGETS ITSELF TO A GROUP OF 90 RACIALLY MIXED HIGH SCHOOL SENIORS. THE LEARNING/LIVING TERM PROGRAM OF DARTMOUTH COLLEGE, DARTMOUTH, NEW HAMPSHIRE; WILDERNESS WORKSHOP, POTSDAM STATE COLLEGE, POTSDAM, NEW YORK; AND THE SURVIVAL, URGENCY, RECREATION, GROWTH, AND ENTHUSIASM PROGRAM (S.U.R.G.E.) OF BOSTON UNIVERSITY OFFER PROGRAMS FOR COLLEGE STUDENTS. IN THE WILDERNESS ENVIRONMENTAL SEMINARS, SAN JUAN UNIFIED SCHOOL DISTRICT, CARMICHAEL, CALIFORNIA; AND THE BOULDER VALLEY INSTITUTE, LAFAYETTE, COLORADO ANY STUDENT IS ENCOURAGED TO ENROLL. PROJECT DIRECTORS AND OFFICIAL ADDRESSES ARE PROVIDED FOR FURTHER INFORMATION. (DE)

ACCESSION NUMBER: EDC99977

PUBLICATION DATE: DEC 73

TITLE: INDOOR AND OUTDOOR SPACE FOR CHILDREN IN  
NURSERY-KINDERGARTEN PROGRAMS. EXCHANGE BIBLIOGRAPHY NO.  
502.

PERSONAL AUTHOR: BARTHOLOMEW, ROBERT

DESCRIPTOR: \*BIBLIOGRAPHIES; DAY CARE PROGRAMS; DESIGN  
NEEDS; \*EARLY CHILDHOOD EDUCATION; FACILITY REQUIREMENTS;  
\*INTERIOR SPACE; KINDERGARTEN; KINDERGARTEN CHILDREN;  
NURSERY SCHOOLS; OUTDOOR EDUCATION; \*PHYSICAL ENVIRONMENT;  
\*PLAYGROUNDS; PRESCHOOL EDUCATION; PRIMARY EDUCATION; SPACE  
UTILIZATION

DESCRIPTIVE NOTE: 17P.

FOR THE AVERAGE CHILD IN THE THREE TO SIX AGE GROUP,  
CONSIDERABLE TIME IS SPENT IN A GROUP OR INSTITUTIONAL  
SETTING, SUCH AS DAY CARE CENTERS, NURSERY SCHOOLS, OR  
KINDERGARTENS. THE PHYSICAL FACILITIES OF A DAY CARE OR  
SCHOOL SETTING ARE VERY BASIC TO THE PROGRAM -- PROVIDING  
OPPORTUNITIES FOR THE PROGRAM IMPLEMENTATIONS. VARIOUS  
PRINCIPLES AND METHODS FOR SELECTING AND ORGANIZING SPACE  
AND EQUIPMENT ARE IMPLICIT IN THE OPERATION OF GOOD  
PRESCHOOLS. THIS BIBLIOGRAPHY WAS SELECTED AND DESIGNED TO  
MEET THESE NEEDS. (AUTHOR/MLF)

AVAILABILITY: COUNCIL OF PLANNING LIBRARIANS, P.O. BOX 229,  
MONTICELLO, ILLINOIS 61856 (\$1.50)

ACCESSION NUMBER: ED100018

PUBLICATION DATE: 73

TITLE: CONSIDERATIONS IN DEVELOPING AN OUTSIDE AREA FOR  
SCHOOLS/CENTERS FOR YOUNG CHILDREN.

PERSONAL AUTHOR: RANZONI, PATRICIA

DESCRIPTOR: BIBLIOGRAPHIES; \*CHILD DEVELOPMENT; DAY CARE  
SERVICES; EDUCATIONAL OBJECTIVES; ELEMENTARY EDUCATION;  
ENVIRONMENTAL INFLUENCES; EQUIPMENT EVALUATION; LEARNING  
THEORIES; \*OUTDOOR EDUCATION; \*PLAY; \*PLAYGROUNDS; PRESCHOOL  
EDUCATION; \*PRESCHOOL PROGRAMS; SAFETY; SPACE UTILIZATION

DESCRIPTIVE NOTE: 48P.

THIS PAPER PRESENTS A NUMBER OF THEORETICAL PERSPECTIVES ON CHILD DEVELOPMENT, THE CONCEPT OF PLAY, AND THE ROLE OF THE ADULT IN THE PLAY SPACE. IT ARGUES FOR THE POSITION THAT ADULTS MUST STOP PLANNING THE CURRICULUM IN SUCH A WAY THAT IT SEGMENTS AND SEPARATES VARIOUS ASPECTS OF CHILDREN'S LIVES AND MUST CONTINUALLY REAFFIRM THE VALIDITY OF PLAY. GENERAL CONSIDERATIONS IN THE DEVELOPMENT OF AN OUTSIDE AREA FOR YOUNG CHILDREN INCLUDE THE AGE GROUP SERVED AND THEIR DEVELOPMENTAL NEEDS, THE LOCATION OF THE SCHOOL/CENTER, THE TIME THE AREA WILL BE USED, AND THE CLIMATIC CONDITIONS OF THE REGION. SPECIFIC CONSIDERATIONS DISCUSSED ARE LOCAL AND STATE REGULATIONS FOR SAFETY; PROFESSIONAL STANDARDS; ASSESSMENT OF AVAILABLE SPACE; THE MANNER IN WHICH THE SPACE IS SET UP, EQUIPPED, AND MANAGED; CRITICISMS OF CONVENTIONAL PLAYGROUND EQUIPMENT; AND PREPARATION OF THE STAFF, PARENTS, AND THE CHILDREN. THE PAPER CONCLUDES WITH AN EVALUATIVE CHECKLIST AND A BIBLIOGRAPHY. (AUTHOR/MLF)

ACCESSION NUMBER: ED100582

PUBLICATION DATE: JUN 74

TITLE: AN OUTDOOR EDUCATION GUIDE FOR URBAN TEACHERS OF THE EMOTIONALLY HANDICAPPED. PROCEEDINGS: SPECIAL STUDY INSTITUTE (JUNE 1974).

DESCRIPTOR: ART EDUCATION; AUDITORY PERCEPTION; \*ELEMENTARY EDUCATION; \*EMOTIONALLY DISTURBED; LANGUAGE ARTS; MATHEMATICS; \*OUTDOOR EDUCATION; PERCEPTUAL MOTOR LEARNING; PHYSICAL EDUCATION; \*RESOURCE GUIDES; SCIENCE EDUCATION; SENSORY EXPERIENCE; SOCIAL STUDIES; \*URBAN ENVIRONMENT.

IDENTIFIER: NEW YORK CITY

DESCRIPTIVE NOTE: 155P.; FOR RELATED DOCUMENTS, SEE RC 008 274-281

TRADITIONALLY PROGRAM STRATEGIES SUCH AS SPECIAL CLASSES, RESOURCE ROOMS, AND ITINERANT TEACHING HAVE BEEN EMPLOYED TO MEET THE UNIQUE NEEDS OF THE EMOTIONALLY HANDICAPPED CHILD. URBAN OUTDOOR EDUCATION IS PRESENTED AS AN ADDITIONAL CURRICULUM CONCEPT IN THIS RESOURCE GUIDE FOR ELEMENTARY STUDENTS. SINCE THE OUTDOOR EDUCATION METHOD CENTERS ON EMPLOYING THE RESOURCES OF THE SCHOOL SITE, SCHOOL COMMUNITY, AND OTHER LOCAL RESOURCES, ALL MATERIAL IN THIS GUIDE IS BASED ON ACTIVITIES DEVELOPED BY TEACHER PARTICIPANTS OF THE SPECIAL STUDY INSTITUTE AND DERIVED FROM A ONE BLOCK AREA IN NEW YORK CITY. THIS BLOCK AFFORDED SUCH RESOURCES AS URBAN RENEWAL, VACANT LOTS, A PUBLIC SCHOOL, SMALL STORES, A NURSING HOME, A SUBWAY ENTRANCE, AND BUILDINGS OF VARIED DATES, CONSTRUCTION, AND ARCHITECTURAL DESIGN--ALL OF WHICH MAY BE GENERALIZED TO OTHER URBAN SETTINGS. SUGGESTED ACTIVITIES, NOT MEANT TO BE COMPREHENSIVE, ARE PRESENTED AS SPECIFIC EXAMPLES FROM WHICH OTHER URBAN SCHOOLS MIGHT PATTERN THEIR CURRICULUMS. EACH CHAPTER CONSTITUTES AN INDIVIDUAL SUBJECT GUIDE. SUBJECT AREAS COVERED ARE: (1) ARTS AND CRAFTS; (2) ENVIRONMENTAL (SENSORY) AWARENESS; (3) LANGUAGE ARTS; (4) MATHEMATICS; (5) PHYSICAL EDUCATION; (6) SCIENCE; (7) SOCIAL STUDIES; AND (8) SOUNDS AND MOVEMENT. INDIVIDUAL BIBLIOGRAPHIES FOLLOW EACH SUBJECT AREA. (JC)

ACCESSION NUMBER: ED100583

PUBLICATION DATE: JUN 74

TITLE: TEACHING ART IN THE URBAN OUT-OF-DOORS.

PERSONAL AUTHOR: DAVIS, DAVID; AND OTHERS

DESCRIPTOR: ART ACTIVITIES; \*ART EDUCATION; ART MATERIALS; COMMUNITY RESOURCES; CURRICULUM GUIDES; DESIGN; ELEMENTARY EDUCATION; \*EMOTIONALLY DISTURBED; MEDIA SELECTION; \*OUTDOOR EDUCATION; \*RESOURCE GUIDES; SPATIAL RELATIONSHIP; TACTUAL PERCEPTION; \*URBAN EDUCATION; VISUAL PERCEPTION

IDENTIFIER: NEW YORK CITY

DESCRIPTIVE NOTE: 19P.; FOR RELATED DOCUMENTS, SEE ED 100 582; ED 100 584-590

THIS CURRICULUM GUIDE FOR TEACHERS OF THE EMOTIONALLY HANDICAPPED (K-6) EXEMPLIFIES THE WAY IN WHICH BOTH ART CONCEPTS AND ACTIVITIES CAN BE DEVELOPED UTILIZING ONE BLOCK OF AN URBAN AREA IN NEW YORK CITY. VISUAL, TACTILE, AND SPATIAL CONCEPTS ARE PRESENTED VIA MINIBLOCK, MACROBLOCK, AND MAXIBLOCK PERCEPTION. SUGGESTIONS FOR CONCEPT DEVELOPMENT INCLUDE USE OF A CARDBOARD VIEWER (VISUAL), RUBBINGS (TACTILE), AND A BLOCK MODEL (SPATIAL). SUGGESTIONS FOR SPECIFIC ON-SITE ART ACTIVITIES INCLUDE: FILM-MAKING, PHOTOGRAPHY, SKETCHING, BLUEPRINTING, ARCHITECTURAL WALKS (SEARCH FOR FUNCTIONAL VS DECORATIVE DESIGN), TELEVISIONING WALKS (PORTA-PACK RECORDING), RECORDING WALKS (TAPES), TREASURE HUNTS (SPECIFIC ARCHITECTURAL DETAIL), LETTERING HUNT (OLD VS NEW), FOUND OBJECT SCULPTURE, AND TEXTURE PANELS (TWO DIMENSIONAL MATERIALS). IN AN EFFORT TO EMPHASIZE THE VERSATILITY OF A ONE BLOCK AREA, THE SITE IS DEFINED AS: (1) AN ART RESOURCE; (2) AN EVENTS AREA (ART DISPLAYS, PAGEANTS, ETC.); AND (3) A SUBJECT MATTER SOURCE (BUILDINGS, SIDEWALKS, ROADS AND TRAFFIC, VIEWS, VACANT LOTS, PLAYGROUNDS, NATURE OBJECTS, AND FENCES). UNDER EACH SUBJECT MATTER SOURCE SUGGESTIONS ARE MADE FOR ART ACTIVITIES AND MATERIALS. FOR EXAMPLE, UNDER SIDEWALKS, RUBBINGS, TEXTURE, CLAY PRINTS, PLASTER CASTING, AND PAINTING WITH WATER COLORS ON THE SIDEWALK ARE SUGGESTED. (JC)

AVAILABILITY: NOT AVAILABLE SEPARATELY, SEE RC 008 273

32  
36

ACCESSION NUMBER: ED100584

PUBLICATION DATE: JUN 74

TITLE: ENVIRONMENTAL AWARENESS (SENSORY AWARENESS).

PERSONAL AUTHOR: CARPENTER, MARIAN

DESCRIPTOR: DISCOVERY LEARNING; ELEMENTARY EDUCATION;  
\*EMOTIONALLY DISTURBED; ENTOMOLOGY; ENVIRONMENTAL EDUCATION;  
MEDIA SELECTION; \*OUTDOOR EDUCATION; \*RESOURCE GUIDES;  
\*SENSORY EXPERIENCE; \*URBAN ENVIRONMENT

DESCRIPTIVE NOTE: 24P.; FOR RELATED DOCUMENTS, SEE ED 100  
582-583; ED 100 585-590

CAPITALIZING ON THE RESOURCES AVAILABLE WITHIN A CITY  
BLOCK, THIS RESOURCE GUIDE FOR THE EMOTIONALLY HANDICAPPED  
(K-6) DESCRIBES METHODS AND PROCEDURES FOR DEVELOPING  
SENSORY AWARENESS IN THE URBAN OUT-OF-DOORS. CONCEPTUAL  
FOCUS IS ON INTERDEPENDENCY ("LIVING THINGS ARE  
INTERDEPENDENT"). INVOLVEMENT IN THE ENVIRONMENT (OBSERVING,  
THINKING, DOING) IS THE BASIC EMPHASIS. NINE ACTIVITIES  
FOCUSING ON THE DISCOVERY OF NATURE VIA THE SENSES ARE  
DESCRIBED. PRIMARILY EXPLORATION ORIENTED, THESE ACTIVITIES  
AND AN INDICATION OF PROCEDURE ARE LISTED BELOW: (1)  
GRASS—CHECK THE SIDEWALK CRACKS TO SEE HOW MANY DIFFERENT  
GRASSES GROW THERE. VISIT YOUR PLAYGROUND AND SEE IF ANY OF  
THE EQUIPMENT IS SHAPED LIKE YOUR GRASS. (2) TREES—FIND A  
TREE IN YOUR NEIGHBORHOOD. WHAT DOES YOUR TREE FEEL LIKE?  
(3) A WINDY DAY—TAKE A WALK ON A WINDY DAY. DID YOUR SKIN  
TINGLE? (4) WILD ANIMALS IN THE CITY—VISIT A PARK OR YOUR  
SCHOOL YARD. HOW MANY ANIMALS DID YOU HEAR OR SEE? (5)  
ANTS—WATCH THE ANTS IN YOUR SCHOOL YARD. DO THEY ALL LOOK  
ALIKE? (6) SOIL—DIG A HOLE. IS THE SOIL DAMP OR DRY? (7)  
ROCKS AND STONES—PICK UP A ROCK AND LOOK AT IT. WHAT SHAPE  
AND COLOR IS IT? (8) COLOR AND TEXTURE—EXPLORE THE OUTSIDE  
OF YOUR BUILDING. DO TEXTURES MAKE THE SAME COLORS LOOK  
DIFFERENT? (9) SPRING—HEAR, SMELL, FEEL, AND TASTE SPRING.  
(JC)

AVAILABILITY: NOT AVAILABLE SEPARATELY, SEE RC 008 273

ACCESSION NUMBER: ED100585

PUBLICATION DATE: JUN 74

TITLE: LANGUAGE ARTS.

PERSONAL AUTHOR: KEENER, PAUL L.

DESCRIPTOR: EDUCATIONAL OBJECTIVES; ELEMENTARY EDUCATION;  
\*EMOTIONALLY DISTURBED; \*LANGUAGE ARTS; LEARNING ACTIVITIES;  
LISTENING; MEDIA SELECTION; \*OUTDOOR EDUCATION; READING;  
\*RESOURCE GUIDES; SELF EXPRESSION; SENSORY EXPERIENCE;  
\*URBAN ENVIRONMENT; WRITING

DESCRIPTIVE NOTE: 34P.; FOR RELATED DOCUMENTS, SEE ED 100  
582-584; ED 100 586-590

CAPITALIZING ON THE RESOURCES AVAILABLE IN AN URBAN CITY BLOCK, THIS RESOURCE GUIDE FOR THE EMOTIONALLY HANDICAPPED (K-6) PRESENTS A RESOURCE LIST AND OBJECTIVES AND ACTIVITIES RELATIVE TO TEACHING LANGUAGE ARTS (READING, ENGLISH, LISTENING, SPEAKING, AND WRITING). THE RESOURCE LIST IS COMPRISED OF APPROXIMATELY 150 PHYSICAL FACILITIES (E.G., BUILDINGS), FUNCTIONS (E.G., TRAFFIC), AND RESOURCES (E.G., BROKEN GLASS). CONCEIVED AS A BEGINNING FROM WHICH THE TEACHER CAN CREATIVELY USE HIS OWN URBAN ENVIRONMENT, THIS GUIDE IDENTIFIES 92 OBJECTIVES AND ACCOMPANYING ACTIVITIES. THE SCOPE OF THE OBJECTIVES REVEALS A PROGRESSION FROM SIMPLE RECOGNITION (SENTENCE PARTS) TO ACTUAL PRODUCTION (STORY WRITING), INCLUDING SUCH OBJECTIVES AS LEARNING TO SPELL, USE REFERENCE BOOKS, READ A NEWSPAPER, DEVELOP VOCABULARY, MAKE COMPARISONS, CLASSIFY, DRAMATIZE, WRITE LETTERS. THE ACCOMPANYING ACTIVITIES EMPHASIZE SENSORY PERCEPTION AND UTILIZATION OF THE URBAN OUT-OF-DOORS. FOR EXAMPLE, WRITING A BIOGRAPHY OF A FIRE HYDRANT IS THE ACTIVITY WHICH ACCOMPANIES THE OBJECTIVE OF TEACHING CHILDREN ABOUT PERSONIFICATION. WRITING A STORY ABOUT THE STREET NOISES HEARD ON A WALK IS THE ACTIVITY ACCOMPANYING A CREATIVE WRITING OBJECTIVE. (JC)

AVAILABILITY: NOT AVAILABLE SEPARATELY, SEE RC 008 273

ACCESSION NUMBER: ED100586

PUBLICATION DATE: JUN 74

TITLE: MATHEMATICS.

PERSONAL AUTHOR: COSTELLAND, JANET; SCAFFA, MATTHEW

DESCRIPTOR: ACTIVITIES; DISCOVERY LEARNING; ELEMENTARY EDUCATION; \*EMOTIONALLY DISTURBED; GEOMETRY; HEIGHT; MATHEMATICAL CONCEPTS; \*MATHEMATICS; MEDIA SELECTION; \*OUTDOOR EDUCATION; PROBLEM SOLVING; \*RESOURCE GUIDES; \*URBAN ENVIRONMENT

DESCRIPTIVE NOTE: 12P.; FOR RELATED DOCUMENTS, SEE ED 100 582-585; ED 100 587-590

THE PRODUCT OF A SPECIAL STUDIES INSTITUTE, THIS TEACHER DEVELOPED RESOURCE GUIDE FOR THE EMOTIONALLY HANDICAPPED (K-6) PRESENTS 37 ACTIVITIES DESIGNED TO DEVELOP MATHEMATICS CONCEPTS AND SKILLS UTILIZING THE URBAN OUT-OF-DOORS. FOCUS IS ON EXPERIENCING MATH MODELS, PATTERNS, PROBLEMS, AND RELATIONSHIPS FOUND IN AN URBAN ENVIRONMENT. ACTIVITIES ARE NUMBERED, AND EACH ACTIVITY IS CORRELATED WITH ONE OF SIX SPECIFIC MATHEMATICAL CONCEPTS AND/OR SKILLS. LISTED BELOW ARE THE SIX TOPICS AND EXAMPLES OF CORRESPONDING ACTIVITIES: (1) SETS, NUMBERS, AND NUMERATION—E.G.; TAKE A 10 MINUTE WALK. KEEP A RECORD OF ALL THE NUMERALS YOU SAW AND THEIR USES. (2) BASIC OPERATIONS WITH WHOLE NUMBERS—E.G.; HOW HIGH IS THE BASKETBALL BASKET? HOW HIGH CAN YOU JUMP? HOW FAR CAN YOU BROAD JUMP? WHAT IS THE DIFFERENCE BETWEEN THE HEIGHT AND THE DISTANCE YOU CAN JUMP? WHAT IS THE RATIO BETWEEN THEM? (3) MEASUREMENT (TIME, LINEAR, WEIGHT, AREA, TEMPERATURE)—E.G.; (TIME) ESTIMATE THE TIME IT WOULD TAKE YOU TO WALK AND THEN RUN THE LENGTH OF YOUR BLOCK. TIME YOURSELF. DO THIS FOR SEVERAL DISTANCES. RECORD YOUR DATA. (4) GEOMETRY—E.G.; TAKE A WALK. LOOK FOR SHAPES THAT ARE SYMMETRICAL. HOW MANY AXIS OF SYMMETRY DO THEY HAVE? (5) PROBABILITY AND STATISTICS—E.G.; HOW MANY STORES ARE THERE ON YOUR BLOCK? WHAT KIND? (6) PROBLEM SOLVING—ALL ACTIVITIES. (JC)

AVAILABILITY: NOT AVAILABLE SEPARATELY, SEE RC 008 273

ACCESSION NUMBER: ED100587

PUBLICATION DATE: JUN 74

TITLE: PHYSICAL EDUCATION THROUGH MOVEMENT IN THE CITY.

PERSONAL AUTHOR: MUNZ, LORRAINE

DESCRIPTOR: ADAPTED PHYSICAL EDUCATION; ATHLETICS; CAMPING; DISCOVERY LEARNING; \*EMOTIONALLY DISTURBED; GAMES; LIFTING; MEDIA SELECTION; \*OUTDOOR EDUCATION; PERCEPTUAL MOTOR LEARNING; PHYSICAL ACTIVITIES; \*PHYSICAL EDUCATION; \*RESOURCE GUIDES; RUNNING; SPATIAL RELATIONSHIP; \*URBAN ENVIRONMENT

DESCRIPTIVE NOTE: 11P.; FOR RELATED DOCUMENTS, SEE ED 100 582-586; ED 100 588-590

THE PRODUCT OF A SPECIAL STUDIES INSTITUTE, THIS TEACHER DEVELOPED RESOURCE GUIDE FOR THE EMOTIONALLY HANDICAPPED (K-6) PRESENTS CONCEPTS AND ACTIVITIES RELATIVE TO PHYSICAL EDUCATION IN THE URBAN OUT-OF-DOORS. FOCUS IS ON ADAPTING PHYSICAL EDUCATION TO AN URBAN ENVIRONMENT, UTILIZING CITY RESOURCES AND INSTILLING SKILLS NECESSARY TO COPE WITH URBAN LIVING. CONCEPTS AND ACTIVITY SUGGESTIONS ACCOMPANY 10 GENERAL ACTIVITY AREA DESCRIPTIONS WHICH ARE DESCRIBED AS FOLLOWS: (1) PARACHUTE PLAY (AN ACTIVITY EXPLORING THE WIND, GRASS, CEMENT, LITTER, AND SOUNDS OF THE CITY); (2) PERCEPTUAL MOTOR DEVELOPMENT (ACTIVITIES DESIGNED TO DEVELOP GROSS AND FINE MOTOR COORDINATION, SPATIAL RELATIONSHIPS, BALANCE, LATERALITY, BODY IMAGERY, ETC.); (3) WHERE, WHAT, HOW, AND HOW BETTER CAN YOU MOVE; (4) CREATIVE MOVEMENT (ACTIVITIES DESIGNED TO STIMULATE IMAGINATIVE MOVEMENT); (5) GAMES, RELAYS, HUNTS; (6) OBJECT HANDLING SKILLS (ACTIVITIES DESIGNED AROUND BALLS, TIRES, WANDS, TO PROMOTE THROWING, CATCHING, STRIKING, AND KICKING SKILLS); (7) INDIVIDUAL SPORTS (ACTIVITIES INCLUDE URBAN MODIFICATIONS OF GOLF, CASTING, TRACK, AND FIELD SPORTS); (8) MAP, COMPASS, AND ORIENTEERING (ACTIVITIES DESIGNED TO TEACH COMPASS SKILLS VIA URBAN HIKES); (9) BICYCLING; AND (10) CAMPCRAFT SKILLS (PITCHING AND STRIKING TENTS). (JC)

AVAILABILITY: NOT AVAILABLE SEPARATELY, SEE RC 008 273

ACCESSION NUMBER: ED100588

PUBLICATION DATE: JUN 74

TITLE: UNDERSTANDING YOUR NEIGHBORHOOD ENVIRONMENT THROUGH SCIENCE.

PERSONAL AUTHOR: BETROS, HARRY

DESCRIPTOR: COMMUNITY HEALTH SERVICES; DISCOVERY LEARNING; ELEMENTARY EDUCATION; \*EMOTIONALLY DISTURBED; ENVIRONMENTAL EDUCATION; MEDIA SELECTION; \*OUTDOOR EDUCATION; PHYSICAL GEOGRAPHY; \*RESOURCE GUIDES; SCIENCE ACTIVITIES; \*SCIENCES; \*URBAN ENVIRONMENT

DESCRIPTIVE NOTE: 17P.; FOR RELATED DOCUMENTS, SEE ED 100 582-587; ED 100 589-590

THE PRODUCT OF A SPECIAL STUDIES INSTITUTE, THIS TEACHER DEVELOPED RESOURCE GUIDE FOR EMOTIONALLY HANDICAPPED (K-6) PRESENTS AN INVESTIGATIVE APPROACH TO SCIENCE, CAPITALIZING ON THE RESOURCES FOUND IN AN URBAN NEIGHBORHOOD. FOCUS IS ON INTEGRATED CURRICULA IN PREPARATION FOR LIFE, WHEREIN ALL SUBJECT AREAS FUNCTION AS TOOLS FOR LIVING IN AND UNDERSTANDING THE "REAL" WORLD. TOPIC PROBLEMS ARE DIVIDED INTO EIGHT GENERAL AREAS FOLLOWED BY SPECIFIC TOPIC PROBLEMS AND QUESTIONS RELATIVE TO SCIENCE STUDIES IN A CITY AREA. TOPIC PROBLEMS, THEIR SUBDIVISIONS, AND QUESTION EXAMPLES ARE LISTED BELOW: (1) BUILDINGS (CONSTRUCTION, DESIGN, KINDS); WHAT IS THE GEOGRAPHIC SOURCE OF NATURAL RESOURCES USED IN CONSTRUCTION? (2) STREET (ROADS, SIDEWALKS, STREET COMMUNICATIONS—SAFETY); WHAT CAUSES ROADS TO BREAK UP? (3) COMMUNITY SERVICES (FIRE AND POLICE PROTECTION); WHAT CONDITIONS ARE NEEDED FOR THINGS TO BURN? (4) COMMUNITY HEALTH (WATER SUPPLY AND SANITATION); WHAT IS A WATERSHED? (5) CITY SOUNDS; WHAT CAUSES SOUND? (6) CULTURAL FACETS (ARCHITECTURE, AUTOMOBILES, COMMERCIAL BUSINESSES); FROM WHAT DO DRUGS COME? (7) NATURAL PHENOMENON (WEATHER—TEMPERATURE, RAIN, WIND, SUN); WHAT IS LIGHT? (8) VACANT LOTS; WHAT FORMS OF LIFE ARE IN VACANT LOTS? (JC)

AVAILABILITY: NOT AVAILABLE SEPARATELY, SEE RC 008 273

ACCESSION NUMBER: ED100589

PUBLICATION DATE: JUN 74

TITLE: SOCIAL STUDIES.

PERSONAL AUTHOR: BIEBER, EDWARD

DESCRIPTOR: ACTIVITIES; DISCOVERY LEARNING; ELEMENTARY EDUCATION; \*EMOTIONALLY DISTURBED; ENVIRONMENTAL EDUCATION; GEOGRAPHY; HISTORY; LOCATIONAL SKILLS (SOCIAL STUDIES); MEDIA SELECTION; \*OUTDOOR EDUCATION; \*RESOURCE GUIDES; \*SOCIAL STUDIES; \*URBAN ENVIRONMENT

DESCRIPTIVE NOTE: 5P.; FOR RELATED DOCUMENTS, SEE ED 100 582-588; ED 100 590

THE PRODUCT OF A SPECIAL STUDIES INSTITUTE, THIS TEACHER DEVELOPED RESOURCE GUIDE FOR THE EMOTIONALLY HANDICAPPED (K-6) PRESENTS SOCIAL STUDY CONCEPTS AND ACTIVITIES RELATIVE TO EDUCATION IN THE URBAN OUT-OF-DOORS. FOCUS IS ON THE STUDY OF MAN (PAST, PRESENT, AND FUTURE) INTERACTING WITH HIS ENVIRONMENT. LISTED BELOW ARE ACTIVITY EXAMPLES: (1) TAKE A WALK AROUND YOUR BLOCK, COUNTING THE NUMBERS AND KINDS OF OCCUPATIONS YOU CAN OBSERVE. WOULD YOU OBSERVE DIFFERENCES IF IT WERE A 100 YEARS AGO? (2) TAKE A WALK OBSERVING BUILDING MATERIALS, SIMILARITIES, AND UTILITY. WHICH CAME FIRST, FORM OR FUNCTION? (3) CONSTRUCT A NEIGHBORHOOD MAP, INCLUDING NORTH-SOUTH ORIENTATION, LATITUDE, LONGITUDE, CONTOUR LINES. (4) CONSTRUCT AN UNDERGROUND MAP OF YOUR NEIGHBORHOOD, INCLUDING WIRES, PIPES, BASEMENTS, AND SEWERS USING SURFACE FEATURES (FIRE HYDRANTS, SEWER PLATES) TO HELP DETERMINE THE MAP. (5) PRETEND YOU HAVE COME BACK TO THIS ERA FROM THE FUTURE AND THE ONLY THINGS LEFT ARE LETTERS AND NUMBERS. WHAT WOULD YOU BE ABLE TO DEDUCE? (6) GO OUTSIDE AND DISCOVER SOME OF MAN'S SYMBOLS (CROSS, FENCE). (7) LOOK AT MAN'S INTERACTING SYSTEMS (SANITATION, FIRE, WATER) AND FIND OUT MORE ABOUT THEM BY INTERVIEWING PEOPLE AND COMPARING THESE SYSTEMS WITH THOSE OF OTHER TIMES AND CULTURES. (8) HOW MANY THINGS CAN YOU FIND IN YOUR NEIGHBORHOOD THAT ARE CONCERNED WITH SAFETY (CROSSWALKS, RADIAL TIRES, RUBBER BUMPERS)? (JC)

AVAILABILITY: NOT AVAILABLE SEPARATELY, SEE RC 008 273

ACCESSION NUMBER: ED100590

PUBLICATION DATE: JUN 74

TITLE: SOUND AND MOVEMENT EXPLORATION ON A CITY BLOCK.

PERSONAL AUTHOR: KOCH, NANA SUE

DESCRIPTOR: DISCOVERY LEARNING; ELEMENTARY EDUCATION;  
\*EMOTIONALLY DISTURBED; ENVIRONMENTAL EDUCATION; MEDIA  
SELECTION; \*OUTDOOR EDUCATION; PERCEPTUAL MOTOR LEARNING;  
\*RESOURCE GUIDES; \*SENSORY TRAINING; \*URBAN ENVIRONMENT

IDENTIFIER: \*MOVEMENT EDUCATION

DESCRIPTIVE NOTE: 17P.; FOR RELATED DOCUMENTS, SEE ED 100  
582-589

THE PRODUCT OF A SPECIAL STUDIES INSTITUTE, THIS TEACHER DEVELOPED RESOURCE GUIDE FOR THE EMOTIONALLY HANDICAPPED (K-6) PRESENTS CONCEPTS AND ACTIVITIES RELATIVE TO SOUND AND MOVEMENT AS EXPLORED IN THE URBAN OUT-OF-DOORS. EMPHASIS IS ON INTEGRATION OF COGNITIVE AND PHYSICAL LEARNING (\*IF A CHILD PHYSICALLY FEELS A CONCEPT, HIS LEARNING OF THAT CONCEPT WILL BE ENHANCED\*). FOCUS IS ON EXEMPLARY MOVEMENT IDEAS IN RELATION TO PARTICULAR FEATURES OF AN URBAN ENVIRONMENT, UTILIZING THE FOLLOWING: (1) BUILDINGS; (2) VACANT LOTS; (3) FIRE HYDRANTS; (4) CLOUDS; (5) MAN-MADE SOUNDS; (6) NATURE-MADE SOUNDS; AND (7) A MUSICAL BAND (COMPOSED OF BOTH MAN-MADE AND NATURE-MADE SOUNDS). FOR EXAMPLE, AFTER A FIRE HYDRANT HAS BEEN OBSERVED AND DESCRIBED, CHILDREN ARE ADDRESSED AS FOLLOWS: "WHAT WOULD IT FEEL LIKE TO BE AS BIG AS A FIRE HYDRANT? TRY IT. SHOW HOW THE WATER GUSHES OUT QUICKLY OR SLOWLY. WHAT IS THE RHYTHM? CAN YOU REPRODUCE THE RHYTHM WITH YOUR BODY? WHAT DOES THE WATER LOOK LIKE WHEN IT HITS THE GROUND? WHAT SHAPES CAN YOU REPRODUCE WITH YOUR BODY?" IT IS SUGGESTED THAT SUCH AN ACTIVITY INCORPORATE ACQUAINTANCE WITH THE SERVICES FIREMEN AND FIRE HYDRANTS GIVE TO THE CITY. (JC)

AVAILABILITY: NOT AVAILABLE SEPARATELY, SEE RC 008 273

ACCESSION NUMBER: ED100637

PUBLICATION DATE: OCT 71

TITLE: WALNUT SPRINGS INTEREST UNIT, FAIRMOUNT AVENUE SCHOOL. PRIMARY UNIT—TEAM I.

DESCRIPTOR: BIOLOGICAL SCIENCES; BOTANY; \*CONSERVATION EDUCATION; \*ELEMENTARY EDUCATION; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR EDUCATION; PRIMARY GRADES; \*SCIENCE EDUCATION; \*TEACHING GUIDES; ZOOLOGY

DESCRIPTIVE NOTE: 50P.

THIS ENVIRONMENTAL EDUCATION TEACHING GUIDE WAS DESIGNED FOR PRIMARY TEACHERS WHO MAY WANT TO DEVELOP THEIR OWN ENVIRONMENTAL EDUCATION UNITS OR WHO MAY WISH TO INTEGRATE THE UNITS CONTAINED IN THE GUIDE INTO THEIR OWN CURRICULUM. THE UNITS IN THE GUIDE WERE DEVELOPED BY PRIMARY TEACHERS AND REFLECT THE EXPERIENCES OF THE FAIRMOUNT AVENUE SCHOOL STUDENTS AND TEACHERS AT A NEARBY PARK. THE GUIDE IS DIVIDED INTO FIVE SMALL INTEREST UNITS WHICH PROVIDE PRIMARY CHILDREN AN OPPORTUNITY TO CHOOSE AN AREA OF LEARNING AND STUDY THIS AREA IN A GROUP SITUATION. THE INTEREST GROUPS WITHIN THE GUIDE INCLUDE THE AQUARIUM INTEREST GROUP, INSECT INTEREST GROUP, DRIED FLOWERS INTEREST GROUP, LEAVES AND TREES INTEREST GROUP AND THE TERRARIUM INTEREST GROUP. EACH INTEREST UNIT CONTAINS OBJECTIVES, PROCEDURES, FIELD TRIP, FOLLOW UP, EVALUATION, AND REFERENCE MATERIALS. FURTHER INFORMATION INCLUDING WILDFLOWER ILLUSTRATIONS; INSECT FACTS; INSTRUCTIONS FOR MAKING AN INSECT CAGE; ILLUSTRATION OF INSECTS, ANIMALS, AND PLANTS; SAFETY RULES; AND A SAMPLE PERMISSION LETTER ARE INCLUDED. (TK)

ACCESSION NUMBER: ED100638

PUBLICATION DATE: MAR 72

TITLE: PLANNING GUIDELINES FOR ENVIRONMENTAL EDUCATION.

PERSONAL AUTHOR: HILL, LARRY

DESCRIPTOR: \*CONSERVATION EDUCATION; EDUCATIONAL PROGRAMS; ELEMENTARY SECONDARY EDUCATION; \*ENVIRONMENT; \*ENVIRONMENTAL EDUCATION; \*NATURAL RESOURCES; OUTDOOR EDUCATION; \*PROGRAM PLANNING; SCIENCE EDUCATION

IDENTIFIER: \*ALASKA

DESCRIPTIVE NOTE: 23P.

THIS PAMPHLET IS DESIGNED TO PROVIDE GUIDELINES WHICH WILL ENABLE FORMAL AND COMMUNITY EDUCATIONAL SYSTEMS TO MAKE BETTER USE OF THE TOTAL LEARNING ENVIRONMENT, INCLUDING NATURAL, MAN-MADE, AND HUMAN RESOURCES AND TO FURTHER THE CONCEPT OF HARMONY BETWEEN MAN AND THE ENVIRONMENT. THE GUIDELINES WERE DRAWN UP IN RESPONSE TO THE INCREASING ENVIRONMENTAL DETERIORATION AND GROWING NEED FOR AN ENVIRONMENTALLY KNOWLEDGEABLE PUBLIC. ENVIRONMENTAL EDUCATION IS VIEWED AS ONE SOLUTION, A LIFE-LONG PROCESS WHICH WILL, THROUGH EVERY ASPECT OF FORMAL AND NONFORMAL EDUCATION, HELP EACH CITIZEN DEVELOP A POSITIVE PHILOSOPHY AND LIFE STYLE TOWARD THE ENVIRONMENT. THE GUIDE INCLUDES SUCH TOPICS AS RECOMMENDATIONS FOR IMPLEMENTING AN ENVIRONMENTAL EDUCATION CURRICULUM, EDUCATIONAL RESPONSIBILITIES OF SCHOOLS, COLLEGES, VOCATIONAL TRAINING INSTITUTES, AND STATE DEPARTMENTS OF EDUCATION, RESOURCE AGENCIES, COMMUNITY RESPONSIBILITIES, AND PROPOSED EDUCATIONAL FACILITIES. DISCUSSION TOPICS, SUGGESTIONS FOR IMPLEMENTATION, AND TABLES ARE INCLUDED. (AUTHOR/TK)

ACCESSION NUMBER: ED100639

PUBLICATION DATE: 73

TITLE: NATURE'S ALPHABET.

PERSONAL AUTHOR: HYLAND, BARB

DESCRIPTOR: CONSERVATION EDUCATION; ENVIRONMENT;  
\*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; LEARNING  
ACTIVITIES; \*NATURAL RESOURCES; \*OUTDOOR EDUCATION; \*SCIENCE  
EDUCATION; SCIENCE UNITS; \*TEACHING GUIDES; UNIT PLAN

DESCRIPTIVE NOTE: 67P.; BEST COPY AVAILABLE

THE PURPOSE OF THIS COLLECTION OF ENVIRONMENTAL EDUCATION UNITS, WRITTEN BY TEACHERS AND ENVIRONMENTAL EDUCATORS, IS TO DEVELOP IN STUDENTS A SENSE OF WONDER, CURIOSITY, AND INTEREST ABOUT THE ENVIRONMENT. THE 26 INTERDISCIPLINARY ACTIVITY UNITS ARE DESIGNED TO BE USED AS PRE-ACTIVITIES OR FOLLOW-UP ACTIVITIES TO OTHER OUTDOOR STUDIES IN THE ELEMENTARY GRADES. THE BOOKLET CONTAINS A UNIT FOR EACH LETTER OF THE ALPHABET, SUCH AS, A-ANTS, B-BUDS, C-COMPOST, D-DIRT. EACH ACTIVITY UNIT IDENTIFIES THE APPROPRIATE GRADE LEVEL, OPTIMAL TIME OF YEAR FOR TEACHING THE UNIT, THE OBJECTIVES, NEEDED MATERIALS, BACKGROUND INFORMATION, PRE-ACTIVITY QUESTIONS, THE ACTIVITY, AND POST ACTIVITIES. THE UNITS ARE FOR KINDERGARTEN THROUGH FOURTH GRADE, AND ARE DESIGNED TO UTILIZE THE OUT-OF-DOORS. THE ACTIVITIES IN THE UNIT INCLUDE MATH ACTIVITIES, ART ACTIVITIES, SENSORY AWARENESS SKILL DEVELOPMENT, AND LANGUAGE ART ACTIVITIES. PREDOMINANT THROUGHOUT THE UNITS IS THE EMPHASIS ON INQUIRY AND DISCOVERY. (TK)

ACCESSION NUMBER: ED100640

PUBLICATION DATE: 73

TITLE: OUTDOOR EDUCATION, STUDENT HANDBOOK.

DESCRIPTOR: BOTANY; \*CONSERVATION EDUCATION; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; MATHEMATICS; NATURAL RESOURCES; \*OUTDOOR EDUCATION; \*SCIENCE EDUCATION; SOCIAL STUDIES; \*TEACHING GUIDES

IDENTIFIER: STUDENT TEXTBOOK

DESCRIPTIVE NOTE: 60P.; CONTAINS COLOR-CODED MATERIALS

THIS GUIDE IS A STUDENT HANDBOOK DESIGNED FOR USE IN THE CLASSROOM AND AT A SCHOOL CAMP. ALTHOUGH THE BOOKLET WAS DESIGNED FOR A SPECIFIC SCHOOL AND A SPECIFIC SCHOOL CAMP, THE MATERIALS WITHIN THE GUIDE MAY BE USED IN OTHER SITUATIONS. THE GUIDE CONTAINS TWO TYPES OF STUDIES. THE FIRST SERVE AS PRE-CAMP STUDIES AND ARE INDICATED BY THE WHITE PAGES IN THE GUIDE. THE PRE-CAMP STUDIES INCLUDE AREA HISTORY, SENSORY DEVELOPMENT, A SOIL STUDY, ECOLOGY STUDY, MATH STUDY, AND A GLOSSARY. THE ACTIVITIES AND TOPICS FOR USE AT THE SCHOOL CAMP, INDICATED BY THE COLORED PAGES, INCLUDE SUCH THINGS AS AN ABANDONED FARM STUDY, JOURNAL PAGES, BIRD STUDY, WILD FLOWER STUDY AND A TREE STUDY. THE ACTIVITIES INVOLVE IDENTIFICATION, OBSERVATION, DISCUSSION, AND PROBLEM SOLVING. (TK)

AVAILABILITY: ERIC/SMEAC, THE OHIO STATE UNIVERSITY, 400 LINCOLN TOWER, COLUMBUS, OHIO 43210 (ON LOAN)



ACCESSION NUMBER: ED100644

PUBLICATION DATE: 73

TITLE: CLASSROOM ACTIVITIES FOR THE INTERLAKES ENVIRONMENTAL AND OUTDOOR EDUCATION PROGRAM.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*ELEMENTARY EDUCATION; ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; MATHEMATICS; NATURAL RESOURCES; \*OUTDOOR EDUCATION; \*SCIENCE EDUCATION; SECONDARY EDUCATION; SOCIAL STUDIES; \*TEACHING GUIDES

DESCRIPTIVE NOTE: 463P.; BEST COPY AVAILABLE; OCCASIONAL MARGINAL LEGIBILITY

THIS TEACHING GUIDE IS A COLLECTION OF ENVIRONMENTAL EDUCATION ACTIVITIES WRITTEN BY VARIOUS EDUCATORS AND ENVIRONMENTALISTS. THE ACTIVITIES ARE DESIGNED FOR USE IN GRADES K-12, EACH ACTIVITY BEING IDENTIFIED BY GRADE LEVEL. THE GUIDE CONTAINS OVER 80 ACTIVITIES THAT ARE LISTED IN A SHORT INTRODUCTORY GUIDE THAT PRECEDES THE ACTUAL ACTIVITIES. THE ACTIVITIES IN THE INTRODUCTORY GUIDE ARE IDENTIFIED BY GRADE LEVEL AND ARE ANNOTATED TO HELP THE TEACHER IDENTIFY APPROPRIATE ACTIVITIES FOR THE GROUP OR SITUATION. ACTIVITY TOPICS SUCH AS DANDELIONS, SHADOWS, RAIN, MATHEMATICS, FOOD CHAINS, EROSION, CREATIVE WRITING, AND VALUES ARE INCLUDED IN THE GUIDE. ALL OF THE ACTIVITY TOPICS INCLUDE APPROPRIATE GRADE LEVEL FOR ACTIVITY USE, OBJECTIVES, BACKGROUND INFORMATION, A PRE-ACTIVITY, A FIELD TRIP, A PROCEDURE OR EXPERIMENT, AND FOLLOW-UP ACTIVITIES. SOME OF THE ACTIVITIES ALSO CONTAIN TABLES, DIAGRAMS, ILLUSTRATIONS, SAMPLE STORIES, OR RESOURCE PEOPLE. (TK)

ACCESSION NUMBER: ED100652

PUBLICATION DATE: 74

TITLE: KINDERGARTEN, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: \*CONSERVATION EDUCATION; EARLY CHILDHOOD EDUCATION; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; \*KINDERGARTEN; LEARNING ACTIVITIES; \*NATURAL RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; \*TEACHING GUIDES

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III; \*PROJECT I C E; TITLE III

DESCRIPTIVE NOTE: 87P.

THIS KINDERGARTEN LEVEL ENVIRONMENTAL EDUCATION GUIDE IS ONE OF A SERIES OF GUIDES, K-12, WHICH WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. THE GUIDES ARE SUPPLEMENTARY IN DESIGN; IT IS THE TEACHER'S DECISION WHEN THE CONCEPTS, OBJECTIVES, ACTIVITIES, AND RESOURCES MAY BEST BE INTEGRATED INTO THE EXISTING CLASSROOM CURRICULUM. THIS GUIDE CONTAINS A SERIES OF 12 EPISODES (MINILESSON PLANS), EACH HAVING A NUMBER OF SUGGESTED IN- AND OUT-OF-CLASS LEARNING ACTIVITIES. THE EPISODES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT GRADE LEVELS. THE KINDERGARTEN GUIDE FOCUSES ON ASPECTS SUCH AS WEATHER, TEMPERATURE, POPULATION, WATER POLLUTION, TRANSPORTATION, THE SEASONS, LITTER, AND A CONSERVATION OF RESOURCES. EACH OF THE 12 CONCEPTS IS COVERED IN ONE OF THE 12 EPISODES CONTAINED IN THE GUIDE. FURTHER, EACH EPISODE OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTED REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS. (AUTHOR/TK)

ACCESSION NUMBER: ED100653

PUBLICATION DATE: 74

TITLE: GRADE ONE, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*ELEMENTARY EDUCATION;  
\*ENVIRONMENTAL EDUCATION; GRADE 1; INSTRUCTIONAL MATERIALS;  
INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; \*NATURAL  
RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; \*TEACHING  
GUIDES

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III;  
ESEA TITLE III; \*PROJECT I C E

DESCRIPTIVE NOTE: 111P.

THIS FIRST GRADE ENVIRONMENTAL EDUCATION GUIDE IS ONE OF A SERIES OF GUIDES, K-12, WHICH WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. THE GUIDES ARE SUPPLEMENTARY IN DESIGN; IT IS THE TEACHER'S DECISION WHEN THE CONCEPTS, OBJECTIVES, ACTIVITIES, AND RESOURCES MAY BEST BE INTEGRATED INTO THE EXISTING CLASSROOM CURRICULUM. THIS GUIDE CONTAINS A SERIES OF 12 EPISODES (MINILESSONS), EACH HAVING A NUMBER OF SUGGESTED IN- AND OUT-OF-CLASS LEARNING ACTIVITIES. THE EPISODES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT GRADE LEVELS. THE FIRST GRADE GUIDE FOCUSES ON ASPECTS SUCH AS PLANETS AND SEASONS, LIVING AND NONLIVING ORGANISMS, OVERPOPULATION, WATER USES, AND ANIMAL ADAPTATION. EACH OF THE 12 CONCEPTS IS COVERED IN ONE OF THE EPISODES CONTAINED IN THE GUIDE. FURTHER, EACH EPISODE OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTED REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS. (AUTHOR/TK)

ACCESSION NUMBER: ED100654

PUBLICATION DATE: 74

TITLE: GRADE TWO, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*ELEMENTARY EDUCATION;  
\*ENVIRONMENTAL EDUCATION; GRADE 2; INSTRUCTIONAL MATERIALS;  
INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; \*NATURAL  
RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; \*TEACHING  
GUIDES

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III;  
ESEA TITLE III; \*PROJECT I C E

DESCRIPTIVE NOTE: 105P.

THIS SECOND GRADE ENVIRONMENTAL EDUCATION GUIDE IS ONE OF A SERIES OF GUIDES, K-12, WHICH WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. THE GUIDES ARE SUPPLEMENTARY IN DESIGN; IT IS THE TEACHER'S DECISION WHEN THE CONCEPTS, OBJECTIVES, ACTIVITIES, AND RESOURCES MAY BEST BE INTEGRATED INTO THE EXISTING CLASSROOM CURRICULUM. THIS GUIDE CONTAINS A SERIES OF EPISODES (MINILESSON PLANS), EACH HAVING A NUMBER OF SUGGESTED IN- AND OUT-OF-CLASS LEARNING ACTIVITIES. THE EPISODES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT GRADE LEVELS. THE SECOND GRADE GUIDE FOCUSES ON ASPECTS SUCH AS GRAPHS, PERSONAL RESPONSIBILITY, SIMPLE MACHINE, FUELS, AND LAND USE. EACH OF THE 12 CONCEPTS IS COVERED IN ONE OF THE EPISODES CONTAINED IN THE GUIDE. FURTHER, EACH EPISODE OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTED REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS. AN APPENDIX CONTAINING RELATED GAME IS INCLUDED. (AUTHOR/TK)

ACCESSION NUMBER: ED100655

PUBLICATION DATE: 74

TITLE: GRADE THREE, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*ELEMENTARY EDUCATION;  
\*ENVIRONMENTAL EDUCATION; GRADE 3; INSTRUCTIONAL MATERIALS;  
INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; \*NATURAL  
RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; \*TEACHING  
GUIDES

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III;  
ESEA TITLE III; \*PROJECT I C E

DESCRIPTIVE NOTE: 121P.

THIS THIRD GRADE ENVIRONMENTAL EDUCATION GUIDE IS ONE OF A SERIES OF GUIDES, K-12, THAT WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. THE GUIDES ARE SUPPLEMENTARY IN DESIGN; IT IS THE TEACHER'S DECISION WHEN THE CONCEPTS, OBJECTIVES, ACTIVITIES, AND RESOURCES MAY BEST BE INTEGRATED INTO THE EXISTING CLASSROOM CURRICULUM. THIS GUIDE CONTAINS A SERIES OF EPISODES (MINI-LESSONS), EACH HAVING A NUMBER OF SUGGESTED IN- AND OUT-OF-CLASS LEARNING ACTIVITIES. THE EPISODES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT GRADE LEVELS. THE THIRD GRADE GUIDE FOCUSES ON ASPECTS SUCH AS FOOD/CLOTHING/SHELTER, FAMILY AND ROLES, WATER QUALITY, DESERT REGIONS, AND SOUND. EACH OF THE 12 CONCEPTS IS COVERED IN ONE OF THE EPISODES CONTAINED IN THE GUIDE. FURTHER, EACH EPISODE OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTED REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS. AN APPENDIX CONTAINING RELATED GAMES IS INCLUDED. (AUTHOR/TK)

ACCESSION NUMBER: ED100656

PUBLICATION DATE: 74

TITLE: GRADE FOUR, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: CONSERVATION EDUCATION; \*ELEMENTARY EDUCATION; \*ENVIRONMENTAL EDUCATION; GRADE 4; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; \*NATURAL RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; \*TEACHING GUIDES

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE; ESEA TITLE III; \*PROJECT I C E

DESCRIPTIVE NOTE: 115P.

THIS FOURTH GRADE ENVIRONMENTAL EDUCATION GUIDE IS ONE OF A SERIES OF GUIDES, K-12, WHICH WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. THE GUIDES ARE SUPPLEMENTARY IN DESIGN; IT IS THE TEACHER'S DECISION WHEN THE CONCEPTS, OBJECTIVES, ACTIVITIES, AND RESOURCES MAY BEST BE INTEGRATED INTO THE EXISTING CLASSROOM CURRICULUM. THIS GUIDE CONTAINS A SERIES OF EPISODES (MINILESSONS), EACH HAVING A NUMBER OF SUGGESTED IN- AND OUT-OF-CLASS LEARNING ACTIVITIES. THE EPISODES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT GRADE LEVELS. THE FOURTH GRADE GUIDE FOCUSES ON ASPECTS SUCH AS SOIL AND ORGANISMS, WATER PURIFICATION, POETRY, AND DESIGN. EACH OF THE 12 CONCEPTS IS COVERED IN ONE OF THE EPISODES CONTAINED IN THE GUIDE. FURTHER, EACH EPISODE OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTED REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS. AN APPENDIX CONTAINING RELATED GAMES IS INCLUDED. (AUTHOR/TK)



ACCESSION NUMBER: ED100657

PUBLICATION DATE: 74

TITLE: GRADE FIVE, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*ELEMENTARY EDUCATION;  
\*ENVIRONMENTAL EDUCATION; GRADE 5; INSTRUCTIONAL MATERIALS;  
INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; \*NATURAL  
RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; \*TEACHING  
GUIDES

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III;  
ESEA TITLE.III; \*PROJECT I C E

DESCRIPTIVE NOTE: 146P.

THIS FIFTH GRADE ENVIRONMENTAL EDUCATION GUIDE IS ONE OF A SERIES OF GUIDES, K-12, WHICH WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. THE GUIDES ARE SUPPLEMENTARY IN DESIGN; IT IS THE TEACHER'S DECISION WHEN THE CONCEPTS, OBJECTIVES, ACTIVITIES, AND RESOURCES MAY BEST INTEGRATED INTO THE EXISTING CLASSROOM CURRICULUM. THIS GUIDE CONTAINS A SERIES OF EPISODES (MINILESSONS), EACH HAVING A NUMBER OF SUGGESTED IN- AND OUT-OF-CLASS LEARNING ACTIVITIES. THE EPISODES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT GRADE LEVELS. THE FIFTH GRADE GUIDE FOCUSES ON ASPECTS SUCH AS SUN, ENERGY, ECOSYSTEMS, INDUSTRIAL GROWTH, SPEECH, AND URBAN AESTHETICS. EACH OF THE 12 CONCEPTS IS COVERED IN ONE OF THE EPISODES CONTAINED IN THE GUIDE. FURTHER, EACH EPISODE OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTED REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS. AN APPENDIX CONTAINING RELATED GAMES IS INCLUDED. (AUTHOR/TK)

ACCESSION NUMBER: ED100658

PUBLICATION DATE: 74

TITLE: GRADE SIX, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*ELEMENTARY EDUCATION;  
\*ENVIRONMENTAL EDUCATION; GRADE 6; INSTRUCTIONAL MATERIALS;  
INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; \*NATURAL  
RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; \*TEACHING  
GUIDES

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III;  
ESEA TITLE III; \*PROJECT I C E

DESCRIPTIVE NOTE: 106P.

THIS SIXTH GRADE ENVIRONMENTAL EDUCATION GUIDE IS ONE OF A SERIES OF GUIDES, K-12, WHICH WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. THE GUIDES ARE SUPPLEMENTARY IN DESIGN; IT IS THE TEACHER'S DECISION WHEN THE CONCEPTS, OBJECTIVES, ACTIVITIES, AND RESOURCES MAY BEST BE INTEGRATED INTO THE EXISTING CLASSROOM CURRICULUM. THIS GUIDE CONTAINS A SERIES OF EPISODES (MINILESSONS), EACH HAVING A NUMBER OF SUGGESTED IN- AND OUT-OF-CLASS LEARNING ACTIVITIES. THE EPISODES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT GRADE LEVELS OR IN DIFFERENT SUBJECT AREAS. THIS GUIDE FOCUSES ON ASPECTS SUCH AS ENERGY, AIR-POLLUTION, NATURAL RESOURCES, AND A POLITICAL CONVENTION TURNED ENVIRONMENTAL. EACH OF THE 12 CONCEPTS IS COVERED IN ONE OF THE EPISODES CONTAINED IN THE GUIDE. FURTHER, EACH EPISODE OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTED REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS. AN APPENDIX CONTAINING RELATED GAMES IS INCLUDED.  
(AUTHOR/TK)

ACCESSION NUMBER: ED100659

PUBLICATION DATE: 74

TITLE: AGRICULTURE, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: \*AGRICULTURAL EDUCATION; CONSERVATION EDUCATION; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; \*SECONDARY EDUCATION; \*TEACHING GUIDES; \*VOCATIONAL EDUCATION

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; \*PROJECT I C E

DESCRIPTIVE NOTE: 107P.

THIS AGRICULTURE GUIDE, FOR USE AT THE SECONDARY LEVEL, IS ONE OF A SERIES OF GUIDES, K-12, WHICH WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. ENVIRONMENTAL PROBLEMS ARE PRESENT IN EVERY COMMUNITY WHERE AGRICULTURE EDUCATION IS OFFERED, AND THEREFORE MANY AGRICULTURE TEACHERS HAVE INCLUDED SOME ENVIRONMENTAL CONCEPTS IN THEIR CURRICULUM. THIS SUPPLEMENTARY GUIDE IS DESIGNED TO SERVE AS A BASIS FOR INCLUSION OF MAJOR ENVIRONMENTAL CONCEPTS WITHIN THE AGRICULTURE CURRICULUM. THE GUIDE CONTAINS A SERIES OF EPISODES WHICH ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT GRADE LEVELS OR IN DIFFERENT SUBJECT AREAS. THE AGRICULTURE GUIDE FOCUSES ON ASPECTS SUCH AS CROP ROTATION, PESTICIDES, AND WOODLOT MANAGERMENTS. THE 12 CONCEPTS ARE COVERED IN ONE OF THE EPISODES CONTAINED IN THE GUIDE. FURTHER, EACH EPISODE OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTED REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS.  
(AUTHOR/TK)

ACCESSION NUMBER: ED100660

PUBLICATION DATE: 74

TITLE: AMERICAN HISTORY, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: AMERICAN HISTORY; \*CONSERVATION EDUCATION;  
\*ENVIRONMENTAL EDUCATION; \*HISTORY; INSTRUCTIONAL MATERIALS;  
INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; NATURAL  
RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; \*SECONDARY  
EDUCATION; \*TEACHING GUIDES

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III;  
ESEA TITLE III; \*PROJECT I C E

DESCRIPTIVE NOTE: 29P.

THIS AMERICAN HISTORY GUIDE, FOR USE AT THE SECONDARY LEVEL, IS ONE OF A SERIES OF GUIDES, K-12, WHICH WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. THE GUIDES ARE SUPPLEMENTARY IN DESIGN, CONTAINING A SERIES OF EPISODES (MINILESSONS) THAT EMPHASIZE THE RELATIONSHIP BETWEEN CURRENT ENVIRONMENTAL PROBLEMS AND AMERICAN ECONOMIC, SOCIAL, AND POLITICAL DEVELOPMENT, PROVIDING THE STUDENT WITH SUCCINCT AND REALISTIC OPPORTUNITIES FOR INVOLVEMENT IN ENVIRONMENTAL CONCERNS. THE EPISODES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT GRADE LEVELS OR IN SUBJECT AREAS. THIS GUIDE FOCUSES ON ASPECTS SUCH AS IMMIGRATION, INDUSTRIALISM, AND THE CIVIL WAR. MOST OF THE 12 CONCEPTS ARE COVERED IN ONE OF THE EPISODES CONTAINED IN THE GUIDE. FURTHER, EACH EPISODE OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTED REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS. (AUTHOR/TK)

ACCESSION NUMBER: ED100661

PUBLICATION DATE: 74

TITLE: ART 7-9, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: \*ART EDUCATION; \*CONSERVATION EDUCATION;  
\*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS;  
INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; NATURAL  
RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; \*SECONDARY  
EDUCATION; \*TEACHING GUIDES

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III;  
ESEA TITLE III; \*PROJECT I C E

DESCRIPTIVE NOTE: 92P.

THIS ART EDUCATION GUIDE, FOR USE IN GRADES 7-9, IS ONE OF A SERIES OF GUIDES, K-12, WHICH WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. THE GUIDES ARE SUPPLEMENTARY IN DESIGN, CONTAINING A SERIES OF EPISODES (MINILESSONS) THAT ARE DESIGNED TO WAKE STUDENTS TO SIGHTS OF BEAUTY AND HARMONY IN THEIR ENVIRONMENT. THE EPISODES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT SUBJECT AREAS. THIS GUIDE FOCUSES ON ASPECTS SUCH AS COLLEGE, ENAMELED JEWELRY, AND LINEAR DESIGN. THE 12 CONCEPTS ARE COVERED IN ONE OF THE EPISODES CONTAINED IN THE GUIDE, FURTHER, EACH EPISODE OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTED REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS. (AUTHOR/TK)

ACCESSION NUMBER: ED100662

PUBLICATION DATE: 74

TITLE: BIOLOGY, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: \*BIOLOGY; CONSERVATION EDUCATION;  
\*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS;  
INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; NATURAL  
RESOURCES; OUTDOOR EDUCATION; \*SCIENCE EDUCATION; \*SECONDARY  
EDUCATION; \*TEACHING GUIDES

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III;  
ESEA TITLE III; \*PROJECT I C E

DESCRIPTIVE NOTE: 119P.

THIS BIOLOGY GUIDE, FOR USE AT THE SECONDARY LEVEL, IS ONE OF A SERIES OF GUIDES, K-12, WHICH WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. THE GUIDES ARE SUPPLEMENTARY IN DESIGN, CONTAINING A SERIES OF EPISODES (MINILESSONS) THAT EMPHASIZE EXPERIMENTATION AND DISCUSSION RELATING TO ENVIRONMENTAL PROBLEMS MAKING SCIENCE MORE RELEVANT TO THE STUDENT. THE EPISODES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT GRADE LEVELS OR IN DIFFERENT SUBJECT AREAS. THIS GUIDE FOCUSES ON ASPECTS SUCH AS PHOTOSYNTHESIS, THE FOOD CHAIN, AND THE WATERCYCLE. THE 12 CONCEPTS ARE COVERED IN ONE OF THE EPISODES CONTAINED IN THE GUIDE. FURTHER, EACH EPISODE OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTED REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS. (AUTHOR/TK)

ACCESSION NUMBER: ED100663

PUBLICATION DATE: 74

TITLE: EARTH SCIENCE, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: CONSERVATION EDUCATION; \*EARTH SCIENCE;  
\*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS;  
INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; NATURAL  
RESOURCES; OUTDOOR EDUCATION; \*SCIENCE EDUCATION; \*SECONDARY  
EDUCATION; \*TEACHING GUIDES

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III;  
ESEA TITLE III; \*PROJECT I C E

DESCRIPTIVE NOTE: 33P.

THIS EARTH SCIENCE GUIDE, FOR USE AT THE SECONDARY LEVEL, IS ONE OF A SERIES OF GUIDES, K-12, THAT WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. THE GUIDES ARE SUPPLEMENTARY IN DESIGN, CONTAINING A SERIES OF EPISODES (MINILESSONS) THAT FOCUS ON STUDENT-CENTERED ACTIVITIES ALLOWING THE STUDENT TO MAKE OBSERVATIONS, COLLECT DATA, INTERPRET RESULTS, AND DRAW CONCLUSIONS. THE EPISODES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT GRADE LEVELS OR IN DIFFERENT SUBJECT AREAS. THIS GUIDE FOCUSES ON ASPECTS SUCH AS CLIMATIC ECOSYSTEMS, LAND USE, AND ATMOSPHERE. MOST OF THE 12 CONCEPTS ARE COVERED IN ONE OF THE EPISODES CONTAINED IN THE GUIDE. FURTHER, EACH EPISODE OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTED REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS. (AUTHOR/TK)

ACCESSION NUMBER: ED100664

PUBLICATION DATE: 74

TITLE: GENERAL MATH 9-12, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; \*MATHEMATICAL APPLICATIONS; MATHEMATICS EDUCATION; NATURAL RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; SECONDARY EDUCATION; \*SECONDARY SCHOOL MATHEMATICS; \*TEACHING GUIDES

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; \*PROJECT I C E

DESCRIPTIVE NOTE: 87P.

THIS GENERAL MATHEMATICS GUIDE, FOR USE IN GRADES 9-12, IS ONE OF A SERIES OF GUIDES, K-12, THAT WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. SINCE THE NATURE OF MATHEMATICS IS ABSTRACT, STUDENTS DO NOT LEARN MATHEMATICS FROM ECOLOGY, NOR ECOLOGY FROM MATHEMATICS. BUT, BY OBSERVATION AND MANIPULATION OF ENVIRONMENTAL DATA, THE STUDENT MAY INDUCTIVELY DISCOVER A PRINCIPLE IN MATHEMATICS WHICH CAN BE REACHED DEDUCTIVELY. THE PURPOSE OF THIS BOOKLET IS TO MAKE AN ATTEMPT TO BRIDGE MATHEMATICS AND ECOLOGY. THE GUIDE IS A SUPPLEMENTARY HANDBOOK OF ECOLOGICALLY-ORIENTED MATHEMATICS EXERCISES, DESIGNED TO BE SELF-CONTAINED AND COMPLETE WITH ANSWERS. THE EXERCISES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. EACH EXERCISE IS INDEXED BY MATHEMATICAL AREA AND MAJOR MATHEMATICAL CONCEPT AND CROSS INDEXED BY ENVIRONMENTAL CONCEPTS. EACH LESSON DEALS WITH A MATHEMATICAL CONCEPT AND ITS APPLICATIONS TO AN ENVIRONMENTAL PROBLEM. FURTHER, EACH LESSON OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTED REFERENCES AND RESOURCE MATERIALS. (AUTHOR/TK)

ACCESSION NUMBER: ED100665

PUBLICATION DATE: 74

TITLE: LANGUAGE ARTS 7-8, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; \*LANGUAGE ARTS; LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; \*SECONDARY EDUCATION; \*TEACHING GUIDES

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; \*PROJECT I C E

DESCRIPTIVE NOTE: 75P.

THIS LANGUAGE ARTS GUIDE, FOR USE IN GRADES 7 AND 8, IS ONE OF A SERIES OF GUIDES, K-12, THAT WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. THE GUIDES ARE SUPPLEMENTARY IN DESIGN, CONTAINING A SERIES OF EPISODES (MINILESSONS) THAT RELATE VARIOUS SKILLS (READING, WRITING, LISTENING, AND SPEAKING) TO ENVIRONMENTAL CONCEPTS. THE EPISODES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE TO SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT GRADE LEVELS OR IN DIFFERENT SUBJECT AREAS. THIS GUIDE FOCUSES ON ASPECTS SUCH AS DISCUSSION, CREATIVE WRITING, AND ROLE PLAYING. THE 12 CONCEPTS ARE COVERED IN ONE OF THE EPISODES CONTAINED IN THE GUIDE. FURTHER, EACH EPISODE OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES AND SUGGESTS REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS. (AUTHOR/TK)

ACCESSION NUMBER: ED100666

PUBLICATION DATE: 74

TITLE: LANGUAGE ARTS 9-12, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; \*LANGUAGE ARTS; LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; \*SECONDARY EDUCATION; \*TEACHING GUIDES

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; \*PROJECT I C E

DESCRIPTIVE NOTE: 80P.

THIS LANGUAGE ARTS GUIDE, FOR USE IN GRADES 9-12, IS ONE OF A SERIES OF GUIDES, K-12, THAT WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. THE GUIDES ARE SUPPLEMENTARY IN DESIGN, CONTAINING A SERIES OF EPISODES (MINILESSONS) THAT RELATE VARIOUS ENGLISH SKILLS (READING, WRITING, LISTENING, AND SPEAKING) TO ENVIRONMENTAL CONCEPTS. THE EPISODES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT GRADE LEVELS OR IN DIFFERENT SUBJECT AREAS. THIS GUIDE FOCUSES ON ASPECTS SUCH AS DEBATE, INTERVIEWS, AND ANALYSIS. THE 12 CONCEPTS ARE COVERED IN ONE OF THE EPISODES CONTAINED IN THE GUIDE. FURTHER, EACH EPISODE OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTS REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS.  
(AUTHOR/TK)

ACCESSION NUMBER: ED100667

PUBLICATION DATE: 74

TITLE: LIFE SCIENCE, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: \*BIOLOGICAL SCIENCES; CONSERVATION EDUCATION;  
\*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS;  
INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; NATURAL  
RESOURCES; OUTDOOR EDUCATION; \*SCIENCE EDUCATION; \*SECONDARY  
EDUCATION; \*TEACHING GUIDES

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III;  
ESEA TITLE III; \*PROJECT I C E

DESCRIPTIVE NOTE: 40P.

THIS LIFE SCIENCE GUIDE IS ONE OF A SERIES OF GUIDES, K-12, THAT WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. THE MATERIALS CONTAINED IN THE GUIDE ARE SUPPLEMENTARY, AND DESIGNED TO AID THE SCIENCE TEACHER IN PROVIDING THE KINDS OF EXPERIENCES NEEDED BY STUDENTS TO GAIN AN UNDERSTANDING OF THE ENVIRONMENTAL LIFE PROCESSES. THE GUIDE CONTAINS A SERIES OF EPISODES (MINILESSONS) THAT ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT GRADE LEVELS OR SUBJECT AREAS. THIS GUIDE FOCUSES ON ASPECTS SUCH AS SUCCESSION, ECOSYSTEMS, AND THE FOOD CHAIN. MOST OF THE 12 CONCEPTS ARE COVERED IN ONE OF THE EPISODES CONTAINED IN THE GUIDE. FURTHER, EACH EPISODE OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTED REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS. (AUTHOR/TK)

ACCESSION NUMBER: ED100668

PUBLICATION DATE: 74

TITLE: MATHEMATICS 7, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: CONSERVATION EDUCATION; \*ENVIRONMENTAL EDUCATION; GRADE 7; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; \*MATHEMATICAL APPLICATIONS; MATHEMATICS EDUCATION; NATURAL RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; SECONDARY EDUCATION; \*SECONDARY SCHOOL MATHEMATICS; \*TEACHING GUIDES

IDENTIFIER: COMPUTATION; ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; \*PROJECT I C E; PROPORTION

DESCRIPTIVE NOTE: 44P.

THIS SEVENTH GRADE MATHEMATICS GUIDE IS ONE OF A SERIES OF GUIDES, K-12, THAT WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. THE GUIDES ARE SUPPLEMENTARY IN DESIGN, CONTAINING A SERIES OF EPISODES (MINILESSONS) THAT REINFORCE THE RELATIONSHIPS BETWEEN ECOLOGY AND MATHEMATICS. IT IS THE TEACHER'S DECISION WHEN THE EPISODES MAY BEST BE INTEGRATED INTO THE EXISTING CLASSROOM CURRICULUM. THE EPISODES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT GRADE LEVELS OR SUBJECT LEVELS. THIS GUIDE FOCUSES ON ASPECTS SUCH AS PROPORTION, COMPUTATION, AND PERCENT. THE 12 CONCEPTS ARE COVERED IN ONE OF THE EPISODES CONTAINED IN THE GUIDE. FURTHER, EACH EPISODE OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTED REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS.  
(AUTHOR/TK)

ACCESSION NUMBER: ED100669

PUBLICATION DATE: 74

TITLE: MATHEMATICS 8, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: CONSERVATION EDUCATION; \*ENVIRONMENTAL EDUCATION; GEOMETRY; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; \*MATHEMATICAL APPLICATIONS; MATHEMATICS EDUCATION; NATURAL RESOURCES; OUTDOOR EDUCATION; \*SCIENCE EDUCATION; SECONDARY EDUCATION; \*SECONDARY SCHOOL MATHEMATICS; \*TEACHING GUIDES

IDENTIFIER: COMPUTATION; ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; \*PROJECT I C E

DESCRIPTIVE NOTE: 48P.

THIS EIGHTH GRADE MATHEMATICS GUIDE IS ONE OF A SERIES OF GUIDES, K-12, THAT WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. THE GUIDES ARE SUPPLEMENTARY IN DESIGN, CONTAINING A SERIES OF EPISODES (MINILESSONS) THAT REINFORCE THE RELATIONSHIPS BETWEEN ECOLOGY AND MATHEMATICS. IT IS THE TEACHER'S DECISION WHEN THE EPISODES MAY BEST BE INTEGRATED INTO THE EXISTING CLASSROOM CURRICULUM. THE EPISODES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT GRADE LEVELS OR SUBJECT LEVELS. THIS GUIDE FOCUSES ON ASPECTS SUCH AS RADIUS, GEOMETRY, AND AVERAGE AND PERCENT. THE 12 CONCEPTS ARE COVERED IN ONE OF THE EPISODES CONTAINED IN THE GUIDE. FURTHER, EACH EPISODE OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTED REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS. (AUTHOR/TK)

ACCESSION NUMBER: ED100670

PUBLICATION DATE: 74

TITLE: MATHEMATICS 9-12, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: CONSERVATION EDUCATION; \*ECOLOGY;  
\*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS;  
INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES;  
\*MATHEMATICAL APPLICATIONS; MATHEMATICS EDUCATION; NATURAL  
RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; SECONDARY  
EDUCATION; \*SECONDARY SCHOOL MATHEMATICS; \*TEACHING GUIDES

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III;  
ESEA TITLE III; \*PROJECT I C E

DESCRIPTIVE NOTE: 78P.

THIS MATHEMATICS GUIDE, FOR USE IN GRADES 9-12, IS ONE OF A SERIES OF GUIDES, K-12, THAT WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. SINCE THE NATURE OF MATHEMATICS IS ABSTRACT, STUDENTS DO NOT LEARN MATHEMATICS FROM ECOLOGY, NOR ECOLOGY FROM MATHEMATICS. BUT, BY OBSERVATION AND MANIPULATION OF ENVIRONMENTAL DATA, THE STUDENTS MAY INDUCTIVELY DISCOVER A PRINCIPLE IN MATHEMATICS WHICH CAN BE REACHED DEDUCTIVELY. THE PURPOSE OF THIS BOOKLET IS TO MAKE AN ATTEMPT TO BRIDGE MATHEMATICS AND ECOLOGY. THE GUIDE IS A SUPPLEMENTARY HANDBOOK OF ECOLOGICALLY-ORIENTED MATHEMATICS EXERCISES, DESIGNED TO BE SELF-CONTAINED AND COMPLETE WITH ANSWERS. THE EXERCISES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. THE PROBLEMS AND EXERCISES ARE DESIGNED TO BE INTEGRATED INTO ALGEBRA, GEOMETRY, ADVANCED ALGEBRA, PROBABILITY, STATISTICS, TRIGONOMETRY, AND ANALYSIS. EACH LESSON DEALS WITH A MATHEMATICAL CONCEPT AND ITS APPLICATIONS TO AN ENVIRONMENTAL PROBLEM. FURTHER, EACH LESSON OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTED REFERENCES AND RESOURCE MATERIALS. (AUTHOR/TK)

ACCESSION NUMBER: ED100671

PUBLICATION DATE: 74

TITLE: MUSIC 7-9, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: CONSERVATION EDUCATION; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; \*MUSIC EDUCATION; NATURAL RESOURCES; OUTDOOR EDUCATION; \*SCIENCE EDUCATION; \*SECONDARY EDUCATION; \*TEACHING GUIDES.

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; \*PROJECT I C E

DESCRIPTIVE NOTE: 47P.

THIS MUSIC EDUCATION GUIDE, FOR USE IN GRADES 7-9, IS ONE OF A SERIES OF GUIDES, K-12, THAT WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. THE GUIDES ARE SUPPLEMENTARY IN DESIGN, CONTAINING A SERIES OF EPISODES (MINILESSONS) THAT REINFORCE ENVIRONMENTAL CONCEPTS AND THEORIES BY DEVELOPING ECOLOGY-RELATED AESTHETIC VALUES. THE EPISODES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT GRADE LEVELS OR IN DIFFERENT SUBJECT AREAS. THIS GUIDE FOCUSES ON ASPECTS SUCH AS DRAMATIZATION, INSTRUMENTS, AND SINGING. THE 12 CONCEPTS ARE COVERED IN ONE OF THE EPISODES CONTAINED IN THE GUIDE. FURTHER, EACH EPISODE OFFERS AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTS REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS.  
(AUTHOR/TK)

ACCESSION NUMBER: ED100672

TITLE: MUSIC 10-12, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: CONSERVATION EDUCATION; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; \*MUSIC EDUCATION; NATURAL RESOURCES; OUTDOOR EDUCATION; \*SCIENCE EDUCATION; \*SECONDARY EDUCATION; \*TEACHING GUIDES

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; \*PROJECT I C. E

DESCRIPTIVE NOTE: 24P.

THIS MUSIC EDUCATION GUIDE, FOR USE IN GRADES 10-12, IS ONE OF A SERIES OF GUIDES, K-12, THAT WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. THE GUIDES ARE SUPPLEMENTARY IN DESIGN, CONTAINING A SERIES OF EPISODES (MINILESSONS) THAT REINFORCE ENVIRONMENTAL CONCEPTS AND THEORIES BY DEVELOPING ECOLOGY-RELATED AESTHETIC VALUES. THE EPISODES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT GRADE LEVELS OR IN DIFFERENT SUBJECT AREAS. THIS GUIDE FOCUSES ON ASPECTS SUCH AS ACOUSTICS AND CONCERT PROGRAMING. MOST OF THE 12 CONCEPTS ARE COVERED IN ONE OF THE EPISODES CONTAINED IN THE GUIDE. FURTHER, EACH EPISODE OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTS REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS. (AUTHOR,TK)

ACCESSION NUMBER: ED100673

PUBLICATION DATE: 74

TITLE: SOCIAL STUDIES 7-8, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: CONSERVATION EDUCATION; ECONOMICS;  
\*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS;  
INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; NATURAL  
RESOURCES; OUTDOOR EDUCATION; POLITICAL SCIENCE; PSYCHOLOGY;  
\*SCIENCE EDUCATION; \*SECONDARY EDUCATION; \*SOCIAL STUDIES;  
SOCIOLOGY; \*TEACHING GUIDES

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III;  
ESEA TITLE III; \*PROJECT I C E

DESCRIPTIVE NOTE: 80P.

THIS SOCIAL STUDIES GUIDE, FOR USE IN GRADES 7 AND 8, IS ONE OF A SERIES OF GUIDES, K-12, THAT WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. THE GUIDES ARE SUPPLEMENTARY IN DESIGN, CONTAINING A SERIES OF EPISODES (MINILESSONS) THAT BROADEN THE STUDENT'S VIEWS OF ENVIRONMENTAL PROBLEMS THROUGH SOCIAL STUDIES ACTIVITIES. THE EPISODES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT GRADE LEVELS OR IN DIFFERENT SUBJECT AREAS. THIS GUIDE FOCUSES ON ASPECTS SUCH AS SOCIOLOGY, ECONOMICS, PSYCHOLOGY, AND POLITICAL SCIENCE. THE 12 CONCEPTS ARE COVERED IN ONE OF THE EPISODES CONTAINED IN THE GUIDE. FURTHER, EACH EPISODE OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTED REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS. (AUTHOR/TK)

ACCESSION NUMBER: ED100674

PUBLICATION DATE: 74

TITLE: WORLD HISTORY, ENVIRONMENTAL EDUCATION GUIDE.

DESCRIPTOR: CONSERVATION EDUCATION; \*ENVIRONMENTAL EDUCATION; \*HISTORY; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; \*SECONDARY EDUCATION; \*SOCIAL STUDIES; TEACHING GUIDES; \*WORLD HISTORY

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; \*PROJECT I C E

DESCRIPTIVE NOTE: 33P.

THIS WORLD HISTORY GUIDE, FOR USE AT THE SECONDARY LEVEL, IS ONE OF A SERIES OF GUIDES, K-12, THAT WERE DEVELOPED BY TEACHERS TO HELP INTRODUCE ENVIRONMENTAL EDUCATION INTO THE TOTAL CURRICULUM. THE GUIDES ARE SUPPLEMENTARY IN DESIGN, CONTAINING A SERIES OF EPISODES (MINILESSONS) THAT EMPHASIZE THE RELATIONSHIP BETWEEN CURRENT ENVIRONMENTAL PROBLEMS AND WORLD ECONOMIC, SOCIAL, AND POLITICAL DEVELOPMENT, PROVIDING THE STUDENT WITH SUCCINCT AND REALISTIC OPPORTUNITIES FOR INVOLVEMENT IN ENVIRONMENTAL CONCERNS. THE EPISODES ARE BUILT AROUND 12 MAJOR ENVIRONMENTAL CONCEPTS THAT FORM A FRAMEWORK FOR EACH GRADE OR SUBJECT AREA, AS WELL AS FOR THE ENTIRE K-12 PROGRAM. ALTHOUGH THE SAME CONCEPTS ARE USED THROUGHOUT THE K-12 PROGRAM, EMPHASIS IS PLACED ON DIFFERENT ASPECTS OF EACH CONCEPT AT DIFFERENT GRADE LEVELS OR IN SUBJECT AREAS. THIS GUIDE FOCUSES ON ASPECTS SUCH AS ANCIENT HISTORY, VALUE CLARIFICATION, AND WORLD CONFLICT. THE 12 CONCEPTS ARE COVERED IN ONE OF THE EPISODES CONTAINED IN THE GUIDE. FURTHER, EACH EPISODE OFFERS SUBJECT AREA INTEGRATION, SUBJECT AREA ACTIVITIES, INTERDISCIPLINARY ACTIVITIES, COGNITIVE AND AFFECTIVE BEHAVIORAL OBJECTIVES, AND SUGGESTED REFERENCES AND RESOURCE MATERIALS USEFUL TO TEACHERS AND STUDENTS. (AUTHOR/TK)

ACCESSION NUMBER: ED100677

PUBLICATION DATE: AUG 73

TITLE: MURRAY STATE UNIVERSITY - TEACHERS' WORKSHOP IN ENVIRONMENTAL EDUCATION (YOUTH STATION, LAND BETWEEN THE LAKES, AUGUST 5-10, 1973).

DESCRIPTOR: CONSERVATION EDUCATION; \*CURRICULUM GUIDES; \*ELEMENTARY GRADES; \*ENVIRONMENTAL EDUCATION; FIELD STUDIES; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; \*LESSON PLANS; MATHEMATICS; NATURAL RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; \*SECONDARY EDUCATION; TEACHER DEVELOPED MATERIALS; TEACHING GUIDES

DESCRIPTIVE NOTE: 94P.; MARGINAL LEGIBILITY

LESSON PLANS FOR ELEMENTARY AND JUNIOR HIGH GRADES, DEVELOPED BY TEACHERS IN AN ENVIRONMENTAL EDUCATION WORKSHOP, ARE COMPILED IN THIS PUBLICATION. CURRICULUM AREAS COVERED BY THE PLANS INCLUDE SCIENCE, LANGUAGE ARTS, MATHEMATICS, SOCIAL STUDIES, ART, RECREATION AND HEALTH. THE LESSON PLANS SPECIFY: SUBJECT CATEGORY, CONTRIBUTOR'S NAME, TITLE OF ACTIVITY, MAJOR CONCEPT, GRADE LEVEL, PURPOSE AND OBJECTIVES, MATERIALS REQUIRED, PROCEDURES TO FOLLOW, VOCABULARY WORDS, RELATED ACTIVITIES, RESOURCES, AND EVALUATION. LISTS OF RESOURCE PERSONNEL AND PARTICIPANTS, THE WORKSHOP SCHEDULE, AND A REFERENCE LIST OF BOOKS, PAMPHLETS, AND FILMS SUPPLEMENT THE LESSON PLANS. (BT)

AVAILABILITY: ERIC/SMEAC, THE OHIO STATE UNIVERSITY, 400 LINCOLN TOWER, COLUMBUS, OHIO 43210 (ON LOAN)

ACCESSION NUMBER: ED100734

PUBLICATION DATE: DEC 74

TITLE: WAYS TO ENVIRONMENTAL EDUCATION, VOLUME 1.

PERSONAL AUTHOR: DAWSON, JOEL, ED.; AND OTHERS

DESCRIPTOR: \*COMMUNITY INVOLVEMENT; COMMUNITY PROGRAMS;  
\*COMMUNITY RESOURCES; \*ECOLOGY; ELEMENTARY EDUCATION;  
\*ENVIRONMENTAL EDUCATION; LEARNING ACTIVITIES; \*OUTDOOR  
EDUCATION; RESOURCE GUIDES; SECONDARY EDUCATION; SENSITIVITY  
TRAINING; VALUES

IDENTIFIER: HIGHER EDUCATION ACT TITLE I

DESCRIPTIVE NOTE: 175P.; COPYRIGHTED MATERIALS REMOVED FROM  
THIS DOCUMENT ARE NOT INCLUDED IN THE PAGINATION

THIS RESOURCE GUIDE IS THE FIRST OF THREE VOLUMES OF ENVIRONMENTAL EDUCATION IDEAS AND ACTIVITIES COMPILED BY PARTICIPANTS AT THE TALLAHASSEE JUNIOR MUSEUM FOR THE BENEFIT OF OTHER ENVIRONMENTAL EDUCATORS. THIS VOLUME CONTAINS TEN BOOKLETS PRODUCED BY VARIOUS COMMUNITY GROUPS TO EDUCATE THEIR MEMBERSHIP OR TARGET GROUPS ABOUT THE ENVIRONMENT. THE LEON COUNTY SCHOOLS PREPARED A BOOKLET OF ACTIVITIES FOR ENVIRONMENTAL SENSITIVITY THAT ARE DIRECTED TOWARD NATURE BUT WHICH ENHANCE SENSITIVITY TO PERSONAL FEELINGS, VALUES, AND NEEDS. THE NIMS MIDDLE SCHOOL ACTIVITIES FEATURE TEN-MINUTE MINI-WALKS FOR ENVIRONMENTAL SENSITIVITY. GIRL SCOUT ACTIVITIES INCLUDE SERVICE PROJECTS LEARNING ABOUT PIONEER LIFE, EXPLORING THE WATERFRONT, AND INVESTIGATING LAND PLANTS AND SMALL ANIMALS. ACTIVITIES ARE DESIGNED TO SHARPEN THE ECOLOGICAL AWARENESS AND SENSE OF WONDER OF SMALL CHILDREN. THE BIG BEND SIERRA CLUB MAKES SUGGESTIONS FOR ENVIRONMENTAL EDUCATION, ENVIRONMENTAL COMMUNITY SERVICE, AND PUBLIC AFFAIRS. TREES ARE THE FOCUS OF ACTIVITIES PREPARED BY THE DEVELOPMENTAL RESEARCH SCHOOL OF FLORIDA STATE UNIVERSITY. THE LEON COUNTY HUMANE SOCIETY'S FILM-RELATED ACTIVITIES FOR ALL AGES ARE INCORPORATED. STUDY PROJECTS WITH ANT COLONIES AND ECOLOGICAL INVESTIGATIONS FOR SECONDARY STUDENTS ARE ALSO INCLUDED. (AUTHOR/SH)

ACCESSION NUMBER: ED101866

PUBLICATION DATE: DEC 74

TITLE: A RESIDENTIAL SCHOOL'S OUTDOOR EDUCATION PROGRAM FOR EMOTIONALLY HANDICAPPED ADOLESCENTS. FINAL PROJECT REPORT OF THE RHINECLIFF UNION FREE SCHOOL DISTRICT, HOLY CROSS CAMPUS.

PERSONAL AUTHOR: RIGOTHI, ANTHONY, ED.

DESCRIPTOR: ACADEMIC ACHIEVEMENT; ACTIVITY LEARNING; \*ADOLESCENTS; DRUG ABUSE; \*EMOTIONALLY DISTURBED; ENGLISH; MATHEMATICS; \*OUTDOOR EDUCATION; PHOTOGRAPHY; PILOT PROJECTS; \*RESIDENTIAL SCHOOLS; SECONDARY EDUCATION; SELF CONCEPT; STUDENT EVALUATION; \*SUMMER PROGRAMS; TEACHER EDUCATION; TEACHER EVALUATION

IDENTIFIER: NEW YORK STATE; \*RHINECLIFF UNION FREE SCHOOL DISTRICT

DESCRIPTIVE NOTE: 118P.

CONCEPT DEFINITION AND ACTIVITY DESCRIPTION CONSTITUTED THE MAJOR FOCUS OF IMPLEMENTATION PROCEEDINGS OF THIS OUTDOOR EDUCATION PROGRAM DESIGNED FOR A RESIDENTIAL SCHOOL SERVING SECONDARY STUDENTS WITH EMOTIONAL AND DRUG RELATED PROBLEMS. MAJOR PROGRAM OBJECTIVES WERE THE DEVELOPMENT OF GREATER ACADEMIC GROWTH AND MORE POSITIVE SELF-CONCEPT FOR RESIDENTS (AS MEASURED VIA PRE- AND POST-TESTING) AND DEVELOPMENT OF A PILOT PROGRAM FOR STUDENTS REQUIRED TO LIVE AND LEARN IN A RESIDENT CENTER. THE PROGRAM (OCTOBER 1973 TO AUGUST 1974) WAS CARRIED OUT VIA A 3 PHASE OPERATION WHICH INVOLVED TEACHER TRAINING AND STUDY OF SITE UTILIZATION, CULMINATING IN A 7 WEEK MODULAR SUMMER PROGRAM AND INVOLVING ALL (APPROXIMATELY 90) STUDENTS IN SEVERAL DISCIPLINES. ONE WEEK SUMMER CLASSES INCLUDED ENGLISH, HISTORY, SCIENCE, ART, HORSEMANSHIP, CAMPING, ADVANCED MATH, ADVANCED COMMUNICATION AND LIBRARY SKILLS, MUSIC, SHOP, PHOTOGRAPHY, REMEDIAL READING AND MATH, ADVANCED SHOP, AND ADVANCED PHOTOGRAPHY. ALL CLASSES HAD OUTDOOR ORIENTED ACTIVITIES SUCH AS STUDYING THE HUDSON RIVER, BUILDING A LOG CABIN, VISITING A SELF-SUFFICIENT COMMUNITY, TRAIL RIDING, SIMULATING AUTO PURCHASES, ETC. STUDENT AND TEACHER EVALUATIONS OF STUDENT ADJUSTMENT WERE GENERALLY FAVORABLE, AS WERE EVALUATIONS OF ACADEMIC ACHIEVEMENT. FUTURE OUTDOOR EDUCATION PROGRAMS WERE ALSO FAVORED. {JC}

ACCESSION NUMBER: ED101898

TITLE: HOMEMADE INNOVATIVE PLAY EQUIPMENT.

PERSONAL AUTHOR: PEARSON, L. ROGER, COMP.

DESCRIPTOR: BLUEPRINTS; COSTS; \*CREATIVE ACTIVITIES;  
\*EQUIPMENT; INSTRUCTIONAL MATERIALS; MUSCULAR STRENGTH;  
OUTDOOR EDUCATION; \*PHYSICAL EDUCATION; \*PHYSICALLY  
HANDICAPPED; PLAYGROUND ACTIVITIES; RECREATIONAL ACTIVITIES;  
\*RESOURCE GUIDES

IDENTIFIER: \*ELEMENTARY SECONDARY EDUCATION ACT TITLE III;  
ESEA TITLE III

DESCRIPTIVE NOTE: 95P.

SPONSORED BY THE TITLE III ELEMENTARY AND SECONDARY EDUCATION ACT PROJECT "DISCOVERY OUTDOOR EDUCATION", THIS GUIDE IS A COLLECTION OF INEXPENSIVE, INNOVATIVE, HOMEMADE EQUIPMENT AND DEVICES FOR PHYSICAL ACTIVITIES. ALTHOUGH DESIGNED FOR THE IMPAIRED, DISABLED, AND HANDICAPPED, THESE MATERIALS ARE ADAPTABLE TO AND APPLICABLE FOR GROUPS AND INDIVIDUALS OF ALL AGES FOR USE IN PHYSICAL EDUCATION, RECREATION, CAMPING, PLAYGROUND, AND RELATED PROGRAMS. WITH EMPHASIS ON CREATIVE, NON-RESTRICTIVE PLAY, THIS GUIDE PRESENTS BRIEF SECTIONS ON BALANCE AND RESISTANCE ACTIVITIES WITH A MAJOR SECTION DEVOTED TO EQUIPMENT RELATIVE TO BALANCE, VAULTING AND JUMPING, CLIMBING AND HANGING, MUSCULAR STRENGTH AND ENDURANCE, AND RHYTHM AND GAMES. EACH DEVICE IS PRESENTED VIA A DETAILED SKETCH ACCOMPANIED BY DELINEATION OF PURPOSE, POSSIBLE ACTIVITY USE, HELPFUL HINTS, SAFETY CONSIDERATIONS, MATERIALS NEEDED FOR CONSTRUCTION, AND THE APPROXIMATE COST (FROM \$1.00 TO \$35.00). APPENDICES A, B, C, AND D PRESENT CONTRIBUTORS, AN APPRAISAL GUIDE (A QUESTIONNAIRE DESIGNED TO ELICIT THE USER'S APPRAISAL OF STRENGTHS AND/OR WEAKNESSES OF THE EQUIPMENT), A QUESTIONNAIRE REQUESTING SUGGESTIONS FOR ADDITIONAL EQUIPMENT, AND A CLASSIFICATION INDEX WHEREIN EQUIPMENT IS INDEXED BY PURPOSE. (JC)

ACCESSION NUMBER: ED101907

PUBLICATION DATE: FEB 75

TITLE: OUTDOOR EDUCATION, A SELECTED BIBLIOGRAPHY (WITH ERIC ABSTRACTS). ERIC/CRESS SUPPLEMENT NO. 4.

DESCRIPTOR: \*ABSTRACTS; \*ANNOTATED BIBLIOGRAPHIES; CAMPING; \*CONSERVATION EDUCATION; CURRICULUM DEVELOPMENT; DOCUMENTATION; EDUCATIONAL RESOURCES; ENRICHMENT ACTIVITIES; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; NATURAL RESOURCES; \*OUTDOOR EDUCATION; PROGRAM DESCRIPTIONS; SUBJECT INDEX TERMS; TEACHING GUIDES

DESCRIPTIVE NOTE: 126P.; FOR RELATED DOCUMENTS, SEE ED 087 582

COMPILED FOR SCHOOL ADMINISTRATORS, TEACHERS, RESEARCHERS, INFORMATION SPECIALISTS, PROFESSIONAL ORGANIZATIONS, STUDENTS, AND OTHERS INTERESTED IN LOCATING AND USING EDUCATIONAL RESOURCES ON OUTDOOR EDUCATION, THIS BIBLIOGRAPHY IS A SUPPLEMENT TO FOUR PREVIOUS PUBLICATIONS BY THE EDUCATIONAL RESOURCES INFORMATION CENTER/CLEARINGHOUSE ON RURAL EDUCATION AND SMALL SCHOOLS (ERIC/CRESS). PART 1 CONTAINS 70 CITATIONS AND ABSTRACTS WHICH HAVE APPEARED IN RESOURCES IN EDUCATION (RIE), AN ERIC PUBLICATION. RIE DOCUMENT RESUMES (JANUARY 1974-DECEMBER 1974) ARE REPRODUCED; THEY INCLUDE ERIC ACCESSION NUMBER (ED), AUTHOR(S), TITLE, SOURCE(S), DATE OF PUBLICATION, ERIC DOCUMENT REPRODUCTION SERVICE PRICE OR ALTERNATE AVAILABILITY, DESCRIPTORS, IDENTIFIER(S), AND AN ABSTRACT. PART 2 CONTAINS 66 CITATIONS FROM CURRENT INDEX TO JOURNALS IN EDUCATION (CIJE), ALSO AN ERIC PUBLICATION. BRIEF ANNOTATIONS APPEAR ONLY WHEN DESCRIPTORS AND IDENTIFIERS CANNOT ADEQUATELY DESCRIBE THE ARTICLE. A COMBINED RIE AND CIJE-SUBJECT INDEX AND AN ERIC DOCUMENT REPRODUCTION ORDER FORM ARE ALSO PROVIDED. ENTRIES COVER A WIDE VARIETY OF EDUCATIONAL MATERIALS RELATIVE TO OUTDOOR EDUCATION. THESE INCLUDE RESEARCH REPORTS, PROGRAM DESCRIPTIONS AND EVALUATIONS, TEACHING GUIDES, ENRICHMENT ACTIVITIES, ETC. (JC)

AVAILABILITY: NATIONAL EDUCATIONAL LABORATORY PUBLISHERS, INC., 813 AIRPORT BLVD., AUSTIN, TEXAS 78702 (STOCK NO. EC-024; \$5.00)

ACCESSION NUMBER: ED101908

PUBLICATION DATE: 74

TITLE: RESIDENT SITES FOR OUTDOOR EDUCATION.

PERSONAL AUTHOR: FORD, PHYLLIS M.; AND OTHERS

DESCRIPTOR: BUILDINGS; \*ELEMENTARY SECONDARY EDUCATION;  
EQUIPMENT; FACILITY GUIDELINES; \*LITERATURE REVIEWS;  
MAINTENANCE; \*OUTDOOR EDUCATION; \*RESOURCE GUIDES; SITE  
ANALYSIS; \*SITE SELECTION; SURVEYS

IDENTIFIER: OREGON; \*RESIDENT PLACES SURVEY

DESCRIPTIVE NOTE: 54P.

IN AN ATTEMPT TO DEVELOP A SET OF RECOMMENDATIONS FOR RESIDENT OUTDOOR EDUCATION SITES FOR OREGON, THIS GUIDE REVIEWS RELEVANT LITERATURE, SURVEYS AND ANALYZES EXISTING SITES, AND PRESENTS RECOMMENDATIONS. THE LITERATURE SURVEY FOCUSES ON SITE SIZE AND OWNERSHIP; DISTANCE FROM SCHOOLS; SEASON OF USE; CAPACITY; NATURAL ATTRIBUTES; LIVING ACCOMMODATIONS, MAINTENANCE AND STORAGE, ADMINISTRATION AREA, INDOOR AND OUTDOOR EDUCATIONAL AREAS AND FACILITIES. QUESTIONNAIRES COMPLETED BY 45 DIRECTORS OF RESIDENT OUTDOOR EDUCATION SITES ARE ANALYZED IN TERMS OF THE FIVE CATEGORIES SURVEYED (GENERAL, NATURAL ATTRIBUTES, INDOOR AREAS/FACILITIES, OUTDOOR AREAS/FACILITIES, AND EQUIPMENT/SUPPLIES). RECOMMENDATIONS STATE THAT A SITE SHOULD: OPERATE 12 MONTHS A YEAR; ACCOMMODATE 100 TO 200 PARTICIPANTS, PLUS STAFF; BE DEVELOPED FOR FLEXIBLE USE BY BOTH SEXES OF ALL AGES AND ACCOMMODATE THOSE WHO ARE HANDICAPPED; CONSIST OF A MINIMUM OF 1.5 ACRES PER PERSON WITH A VARIETY OF TOPOGRAPHICAL FEATURES; BE LOCATED WITHIN A 15 TO 20 MILE DISTANCE FROM A HOSPITAL; HAVE ONE OR MORE TYPES OF WATER RESOURCES; HAVE WINTERIZED QUARTERS; AND PROVIDE TOILETS, SHOWERS, A HEATED DINING HALL, AN INFIRMARY, LAUNDRY FACILITIES, ADMINISTRATION BUILDING, A DIRECTOR'S AND CARETAKER'S RESIDENCE, MAINTENANCE AND STORAGE BUILDINGS, NURSE'S QUARTERS, AND GUEST FACILITIES.  
(JC)

AVAILABILITY: CENTER OF LEISURE STUDIES, 1587 AGATE STREET,  
EUGENE, OREGON 97403 (\$2.00)

ACCESSION NUMBER: ED101927

PUBLICATION DATE: 73

TITLE: GUIDELINES FOR EVALUATING STUDENT OUTCOMES IN ENVIRONMENTAL EDUCATION.

PERSONAL AUTHOR: BENNETT, DEAN B.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*EDUCATIONAL ASSESSMENT; \*ENVIRONMENTAL EDUCATION; EVALUATION; NATURAL RESOURCES; \*OUTDOOR EDUCATION; PROBLEM SOLVING; PROGRAM EVALUATION; \*SCIENCE EDUCATION; SCIENTIFIC METHODOLOGY

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

DESCRIPTIVE NOTE: 71P.

THIS GUIDE, DESIGNED FOR TEACHER USE, FOCUSES ON THE EVALUATION OF ENVIRONMENTAL EDUCATION EXPERIENCES. THE GUIDE, WHICH IS BASED ON A DOCTORAL STUDY, IS STRUCTURED AROUND THREE BASIC EVALUATION QUESTIONS: (1) WHAT KINDS OF ENVIRONMENTAL EDUCATION LEARNING EXPERIENCES CAN YOU EVALUATE?; (2) WHAT OUTCOMES OF ENVIRONMENTAL EDUCATION LEARNING EXPERIENCES CAN YOU LOOK FOR?; AND (3) HOW CAN YOU DETERMINE THE EXTENT TO WHICH THE OUTCOMES HAVE BEEN ACHIEVED? THIS GUIDE IS DIVIDED INTO THREE SECTIONS WHICH DEAL WITH THE EVALUATION QUESTIONS. THE FIRST SECTION CONSIDERS THE GOALS OF ENVIRONMENTAL EDUCATION. THE THREE PHASES OF THE ENVIRONMENTAL EDUCATION PROCESS (DISCOVERY AND INQUIRY; EVALUATION AND PROBLEM IDENTIFICATION; AND PROBLEM SOLVING) ARE CONSIDERED. THE RELATIONSHIP BETWEEN WHAT A PERSON KNOWS AND FEELS IN RELATION TO HIS VALUE SYSTEM, AND HOW ENVIRONMENTAL EDUCATION CAN AFFECT AND CHANGE THIS RELATIONSHIP IS DISCUSSED TO ANSWER QUESTION 2. SECTION THREE DEALS WITH THE THIRD QUESTION; BEHAVIORAL OBJECTIVES AS TOOLS FOR EVALUATING SKILLS IN DISCOVERY AND INQUIRY, EVALUATION AND PROBLEM IDENTIFICATION, AND PROBLEM SOLVING ARE EXAMINED. SAMPLE TEST ITEMS ARE INCLUDED. THE APPENDICES INCLUDE EVALUATION CONSIDERATIONS, A UNIT OUTLINE EXAMPLE, AND THE RESULTS OF AN EVALUATION. (TK)

ACCESSION NUMBER: ED101928

PUBLICATION DATE: 72

TITLE: THE NATURE OF RECREATION. A HANDBOOK IN HONOR OF  
FREDERICK LAW OLMSTED, USING EXAMPLES FROM HIS WORK.

PERSONAL AUTHOR: WURMAN, RICHARD SAUL; AND OTHERS

DESCRIPTOR: CONSERVATION EDUCATION; \*ENVIRONMENT;  
\*ENVIRONMENTAL EDUCATION; \*NATURAL RESOURCES; \*OUTDOOR  
EDUCATION; PHYSICAL EDUCATION; \*RECREATION; RECREATIONAL  
ACTIVITIES; RECREATIONAL FACILITIES; RECREATIONAL PROGRAMS;  
SCIENCE EDUCATION

IDENTIFIER: OLMSTED (FREDERICK LAW)

DESCRIPTIVE NOTE: 76P.

THIS HANDBOOK UTILIZES THE WORKS AND WORDS OF FREDERICK LAW OLMSTED IN COMMUNICATING RECREATIONAL NEEDS AND DESIRES. THE BOOKLET FOCUSES ON PUBLIC, OUTDOOR RECREATION AND THE IMPORTANCE OF ASSESSING ENVIRONMENTAL CONSIDERATIONS WHEN DEVELOPING RECREATIONAL AREAS. THE BOOKLET IS DIVIDED INTO FOUR SECTIONS: THE NATURE OF RECREATION, OUR RECREATIONAL NEEDS, IDENTIFYING OUR NEEDS BY PERFORMANCE COMPONENTS, AND WORKING WITH PERFORMANCE. THE FIRST SECTION INTRODUCES RECREATION AND THE IDEAS OF FREDERICK LAW OLMSTED AND ENCOURAGES THE READER TO EVALUATE HIS RECREATIONAL PURSUITS. OUR RECREATIONAL NEEDS EXAMINES THE NEED FOR EXERCISE, THE AVAILABILITY OF RECREATION, AND THE EDUCATIONAL POSSIBILITIES INHERENT IN NATURE. THE THIRD SECTION DESCRIBES THE COMPONENT FACTORS OF PERFORMANCE—INACTIVE/ACTIVE, INDIVIDUAL/GROUP, YOUNG/OLD, SMALL/LARGE—THAT MUST BE CONSIDERED IN ANALYZING RECREATIONAL NEEDS AND DETERMINING SOLUTIONS TO RECREATIONAL PROBLEMS. WORKING WITH PERFORMANCE PROVIDES GUIDELINES FOR IDENTIFYING RECREATIONAL POSSIBILITIES, ANALYZING RECREATIONAL RESOURCES, AND DEVELOPING A RECREATIONAL PROGRAM AND RECREATIONAL RESOURCES. EACH SECTION INCLUDES PHOTOGRAPHS, WORKSHEETS, AND TEXT; LINE DRAWINGS AND INFORMATION ON VARIOUS GAMES, PLACES, AND RECREATIONAL PLANS ARE FOUND IN THE MARGINS OF THE BOOKLET. AN OLMSTED BIBLIOGRAPHY, RECREATIONAL BIBLIOGRAPHY, AND GAME GLOSSARY ARE ALSO INCLUDED. (AUTHOR/TK)

AVAILABILITY: MIT PRESS, 28 CARLETON STREET, CAMBRIDGE,  
MASSACHUSETTS 02142. (\$4.95)

ACCESSION NUMBER: ED101929

PUBLICATION DATE: 73

TITLE: RESIDENT OUTDOOR EDUCATION HANDBOOK. REVISED, 1973.

DESCRIPTOR: ASTRONOMY; BIOLOGY; \*CONSERVATION EDUCATION;  
\*ENVIRONMENTAL EDUCATION; GEOLOGY; INSTRUCTIONAL MATERIALS;  
LEARNING ACTIVITIES; NATURAL RESOURCES; \*OUTDOOR EDUCATION;  
\*RESIDENT CAMP PROGRAMS; \*SCIENCE EDUCATION; TEACHING  
GUIDES; ZOOLOGY

DESCRIPTIVE NOTE: 87P.; MARGINAL LEGIBILITY

THIS ENVIRONMENTAL EDUCATION GUIDE FOCUSES ON ACTIVITIES AND TOPICS WHICH MAY BE USED IN A SCHOOL CAMPING PROGRAM. ALTHOUGH THIS GUIDE WAS PREPARED FOR A SPECIFIC SCHOOL CAMP, THE TOPICS AND ACTIVITIES INCLUDED IN THE GUIDE ARE APPLICABLE TO MANY SCHOOL CAMP SITUATIONS. SUCH TOPICS AS THE CONSTELLATIONS, POND EXPLORATION, BIRDS, WILDLIFE, FORESTRY, PLANTS, NATURE GAMES, ORIENTEERING, GEOLOGY, AND NATURE CRAFTS ARE INCLUDED. THE TOPICS PROVIDE A VARIETY OF INFORMATION; SOME PROVIDE BACKGROUND INFORMATION AND ACTIVITIES, OTHERS PROVIDE AN OUTLINE FOR PREPARATION AT SCHOOL, CAMP ACTIVITIES, AND IN-CLASS FOLLOW UP. PICTURES, TABLES, TREE KEYS, QUESTIONS, PROBLEM SOLVING ACTIVITY IDEAS, EVALUATION FORMS, AND INFORMATION LISTS ARE INCLUDED IN THIS GUIDE. (TK)

AVAILABILITY: ERIC/SMEAC, THE OHIO STATE UNIVERSITY, 400 LINCOLN TOWER, COLUMBUS, OHIO 43210 (ON LOAN)

ACCESSION NUMBER: ED101935

PUBLICATION DATE: 72

TITLE: ORGANIZATION AND OPERATION OF A K-12 ENVIRONMENTAL EDUCATION PROGRAM. REVISED.

PERSONAL AUTHOR: BENNETT, DEAN B.; WILLINK, WESLEY H.

DESCRIPTOR: \*CONSERVATION EDUCATION; EDUCATIONAL DEVELOPMENT; \*EDUCATIONAL PROGRAMS; \*ENVIRONMENTAL EDUCATION; NATURAL RESOURCES; OUTDOOR EDUCATION; \*PROGRAM GUIDES; \*PROGRAM PLANNING; SCIENCE EDUCATION

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; MAINE

DESCRIPTIVE NOTE: 24P.

ENVIRONMENTAL EDUCATION IS A PROCESS AIMED AT PRODUCING A CITIZENRY THAT IS KNOWLEDGEABLE CONCERNING THE TOTAL ENVIRONMENT AND THE ROLE OF MAN, ABLE TO PARTICIPATE IN ACTIVITIES FOR MAINTAINING AND IMPROVING THE QUALITY OF THE ENVIRONMENT WHILE MEETING HUMAN NEEDS AND MOTIVATED TO DO SO. THIS GUIDE FOCUSES ON THE ORGANIZATION AND OPERATION OF AN ENVIRONMENTAL EDUCATION PROGRAM TO MEET THIS GOAL. THE GUIDE INCLUDES GUIDELINES FOR DEVELOPING BOTH THE FEELING ASPECT OF ATTITUDES, WHICH INCLUDES SELF-IMAGE, SOCIAL RESPONSIBILITY, AND ENVIRONMENTAL APPRECIATION, AND THE UNDERSTANDING ASPECTS OF ATTITUDES WHICH INCLUDE THE NATURAL BIOPHYSICAL ENVIRONMENT AND MAN AND HIS RELATIONSHIPS WITH THE BIOPHYSICAL ENVIRONMENT. THE GUIDE OUTLINES ENVIRONMENTAL EDUCATION AS A PROCESS BASED ON THREE LEVELS OF STUDENT LEARNING EXPERIENCES: DISCOVERY AND INQUIRY, EVALUATION AND PROBLEM IDENTIFICATION, AND PROBLEM SOLVING. A TABLE IS INCLUDED TO FURTHER ILLUSTRATE THE ENVIRONMENTAL EDUCATION PROCESS. A LISTING OF AREAS IN THE COMMUNITY AND ON THE SCHOOL SITE SUITABLE FOR INVESTIGATION, SUGGESTIONS FOR ENVIRONMENTAL EVALUATION AND IDENTIFICATION OF IMPROVEMENT OPPORTUNITIES, AND RELATED ACTIVITIES ARE INCLUDED IN THE GUIDE. THE GUIDE CONCLUDES WITH CURRICULUM CONSIDERATIONS SUCH AS THE ORGANIZATION AND IMPLEMENTATION OF AN ENVIRONMENTAL EDUCATION PROGRAM AND TEACHER IN-SERVICE WORKSHOP. (TK)

ACCESSION NUMBER: ED101936

PUBLICATION DATE: 72

TITLE: GUIDELINES FOR PLANNING AND IMPLEMENTING A COMPREHENSIVE COMMUNITY ENVIRONMENTAL INVENTORY. REVISED, 1972.

PERSONAL AUTHOR: BENNETT, DEAN B.; MACGOWN, RICHARD H.

DESCRIPTOR: COMMUNITY INVOLVEMENT; \*COMMUNITY RESOURCES; \*CONSERVATION EDUCATION; \*ENVIRONMENTAL EDUCATION; HUMAN RESOURCES; NATURAL RESOURCES; OUTDOOR EDUCATION; \*PROGRAM PLANNING; \*SCIENCE EDUCATION; URBAN ENVIRONMENT

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

DESCRIPTIVE NOTE: 38P.; THIS IS A REVISION TO ED 067 233

A COMPREHENSIVE COMMUNITY ENVIRONMENTAL INVENTORY IS AN ONGOING PROCESS OF INVESTIGATION AND STUDY TO COMPILE AND EVALUATE INFORMATION ABOUT THE NATURAL AND MAN-MADE ENVIRONMENTAL FEATURES AND CHARACTERISTICS OF AN AREA, AS WELL AS RELATED SOCIAL, POLITICAL, AND ECONOMIC INFORMATION. SUCH INFORMATION IS IMPORTANT TO THE COMMUNITY IN DEVELOPMENTAL PLANNING AND IN PREVENTING AND RESOLVING ENVIRONMENTAL PROBLEMS AND IT IS IMPORTANT IN SERVING AS A LOCAL BASIS FOR AN ENVIRONMENTAL EDUCATION EMPHASIS IN THE SCHOOL. SECTION I INCLUDES A GENERAL OVERVIEW OF THE USES AND PROCEDURES INVOLVED IN A COMMUNITY ENVIRONMENTAL INVENTORY. SECTION II OUTLINES THE IMPORTANCE OF NATURAL ENVIRONMENTAL FEATURES AND CHARACTERISTICS AS A BASIS FOR THE ASSESSMENT OF NATURAL AREAS AND THEIR IMPORTANCE TO ONE ANOTHER. SECTION III IDENTIFIES HUMAN ENVIRONMENTAL USE AREAS AND CHARACTERISTICS. SECTION IV PROVIDES GUIDELINES AND INFORMATION FOR EVALUATING THE NATURAL ECOLOGICAL EFFECTS OF HUMAN ENVIRONMENTAL USE AND THE DEGREE TO WHICH THESE AREAS MEET HUMAN NEEDS; AND GUIDELINES FOR IDENTIFYING, INTERPRETING, AND EVALUATING ECOLOGICAL VALUES OF LAND, AIR, WATER, PLANTS, AND ANIMALS. THE RELATED SOCIAL, POLITICAL, AND ECONOMIC ASPECTS OF THE COMMUNITY ARE CONSIDERED IN SECTION V. SECTION VI PROVIDES SOURCES FOR INVENTORY INFORMATION. (TK)

ACCESSION NUMBER: ED101938

PUBLICATION DATE: SEP 73

TITLE: FORESTS AND MAN. ENVIRONMENTAL EDUCATION CURRICULUM.  
REVISED.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*CURRICULUM GUIDES;  
\*ENVIRONMENTAL EDUCATION; \*FORESTRY; INSTRUCTIONAL  
MATERIALS; LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR  
EDUCATION; \*SCIENCE EDUCATION; TEACHING GUIDES; UNITS OF  
STUDY (SUBJECT FIELDS)

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III;  
ESEA TITLE III

DESCRIPTIVE NOTE: 157P.; CONTAINS COLOR-CODED MATERIALS

THIS ENVIRONMENTAL EDUCATION MODULE FOCUSES ON FORESTS AND MAN, AND CONTAINS A SERIES OF PAPERS WHICH DEAL WITH TOPICS RELATED TO FOREST ECOLOGY AND CONSERVATION. THE MODULE IS DESIGNED AROUND THE FOUR FOLLOWING IDEAS: (1) THE KINDS OF PLANTS AND ANIMALS AND THE ROLES THEY HAVE IN THE FOREST ENVIRONMENT; (2) USING CONCEPTS OF FOOD WEBS AND ENERGY PYRAMIDS TO UNDERSTAND AND PREDICT THE EFFECTS MAN HAS ON HIS ENVIRONMENT; (3) APPRECIATE NATURE—LEARNING TO FIND AND INTERPRET ANIMAL SIGNS, PLANT GROWTH PATTERNS, AND EDIBLE PLANTS; AND (4) MAN'S ALTERNATIVES—HOW CAN A WILDERNESS AREA BE USED WITHOUT SERIOUSLY CHANGING ITS INHABITANTS. STUDENT PAPERS AND TEACHER PAPERS ARE CONTAINED IN THE MODULE. STUDENT PAPERS COVER SUCH TOPICS AS HARMFUL PLANTS AND ANIMALS, EDIBLE PLANTS, TREE TRUNKS, AND FOOD WEBS; EACH CONTAINS BACKGROUND INFORMATION AND STUDENT SELF-TEST QUESTIONS. THE TEACHER PAPERS (GREEN PAGES) CONTAIN BEHAVIORAL OBJECTIVES, SUGGESTIONS FOR PRESENTING THE PAPERS, AND ANSWERS TO SELF-TEST QUESTIONS. ALSO INCLUDED IN THE GUIDE ARE INSTRUCTIONS FOR USING THE MODULE, A MODULE TIME LINE, FILM DESCRIPTIONS, BEHAVIORAL OBJECTIVES, A CLASS PERFORMANCE SUMMARY SHEET, AND SUPPLEMENTAL PAPERS. PATTERNS FOR TRANSPARENCIES DEALING WITH THE FOOD WEB AND CLASSIFYING TREE LEAVES ARE INCLUDED. (TK)

AVAILABILITY: ERIC/SMEAC, THE OHIO STATE UNIVERSITY, 400  
LINCOLN TOWER, COLUMBUS, OHIO 43210 (ON LOAN)

ACCESSION NUMBER: ED101939

PUBLICATION DATE: JAN 73

TITLE: THE WINTER ENVIRONMENT. ENVIRONMENTAL EDUCATION CURRICULUM.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*CURRICULUM GUIDES; \*EDUCABLE MENTALLY HANDICAPPED; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR EDUCATION; \*SCIENCE EDUCATION; TEACHING GUIDES; UNITS OF STUDY (SUBJECT FIELDS)

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; SEASONS; WINTER

DESCRIPTIVE NOTE: 60P.

WINTER SEEMS TO HOLD MORE MYSTERIES THAN ANY OTHER SEASON. IT CHANGES THE BEHAVIOR OF WILDLIFE AND ALSO BRINGS ABOUT DRASTIC CHANGES IN PLANT LIFE. THIS UNIT, DESIGNED AROUND THE FOLLOWING TWO IDEAS: (1) TO DEVELOP AN APPRECIATION AND UNDERSTANDING OF THE WINTER SEASON AND (2) TO UNDERSTAND HOW PLANTS AND WILDLIFE ARE AFFECTED BY THE WINTER SEASON, ATTEMPTS TO PROVIDE A STUDY OF THE WINTER SEASON ON A LEVEL THAT SPECIAL EDUCATION STUDENTS CAN UNDERSTAND. THE ACTIVITIES ARE AIMED AT LEVEL II AND III EDUCABLE MENTALLY RETARDED SPECIAL EDUCATION CLASSES. THERE ARE FOUR TOPICS: (1) THE SEASON OF WINTER, (2) WILDLIFE IN WINTER, (3) FIELD TRIP—PLANTS IN THE WINTER, AND (4) WILDLIFE IN WINTER—A CONTINUATION OF TOPIC 2. FOR EACH TOPIC THERE ARE BEHAVIORAL OBJECTIVES, STUDENT ACTIVITIES, AND TEACHER SUGGESTIONS. THE NUMBER IN PARENTHESES BY THE ACTIVITY NUMBER INDICATES THE OBJECTIVES THE ACTIVITY HELPS DEVELOP. THE UNIT ALSO INCLUDES GOALS AND OBJECTIVES, AN OBJECTIVE SUMMARY SHEET, A UNIT TIME LINE, A MATERIALS SHEET, AND 18 APPENDIXES WHICH CONTAIN VARIOUS TEACHING AIDS RELATED TO THE ACTIVITIES.  
(TK)

ACCESSION NUMBER: ED101940

PUBLICATION DATE: 73

TITLE: EAST SYRACUSE-MINDA SCHOOLS ENVIRONMENTAL EDUCATION MATERIALS, ELEMENTARY PACKAGE, GRADE 1-GRADE 5.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*CURRICULUM GUIDES; \*ELEMENTARY EDUCATION; ENVIRONMENT; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR EDUCATION; RECYCLING; \*SCIENCE EDUCATION; STUDENT ATTITUDES; TEACHING GUIDES; UNITS OF STUDY (SUBJECT FIELDS); VALUES

DESCRIPTIVE NOTE: 170P.; BEST COPY AVAILABLE; OCCASIONAL MARGINAL LEGIBILITY

THIS SERIES OF FIVE ENVIRONMENTAL EDUCATION UNITS IS DESIGNED FOR USE IN GRADES 1-5. THE UNITS ARE DESIGNED AROUND THE CONCEPTS OF SURVIVAL, INTERDEPENDENCE, SCARCITY, RECYCLEMENT, RIGHTS VS. RESPONSIBILITY, PLANNING, VALUING, SOCIAL FORCES, AND OPTIMISM. EACH UNIT IS FURTHER DEVELOPED AROUND ENVIRONMENTAL GENERALIZATIONS (SUBCONCEPTS), OBJECTIVES, ACTIVITIES AND STRATEGIES, MATERIALS, AND EXPECTED OUTCOMES. THE GRADE 1 UNIT IS DESIGNED TO GIVE THE CHILD A VARIETY OF SENSORY AND INTELLECTUAL EXPERIENCES. THE PURPOSE OF THE GRADE 2 UNIT IS TO EXPAND THE STUDENT'S IDEA OF HIS ENVIRONMENT. THE GRADE 3 UNIT FOCUSES ON AIR AND THE USE OF THE SENSES TO EXPLORE AIR. THE GRADE 4 UNIT UTILIZES AN INTERDISCIPLINARY APPROACH TO EXPLORE WATER AND THE WATER ENVIRONMENTS. THE GRADE 5 UNIT IS CONCERNED WITH THE WISEST MULTIPLE USE OF RENEWABLE RESOURCES AND ENCOURAGES THE CHILD INTO A COMMITMENT AND INVOLVEMENT. APPENDIXES ARE INCLUDED FOR EACH UNIT. (TK)

ACCESSION NUMBER: ED102031

PUBLICATION DATE: 74

TITLE: TEACHING ACTIVITIES IN ENVIRONMENTAL EDUCATION.  
VOLUME II - 1974.

PERSONAL AUTHOR: WHEATLEY, JOHN H., ED.; COON, HERBERT L.,  
ED.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*ENVIRONMENTAL  
EDUCATION; \*INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY  
APPROACH; \*LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR  
EDUCATION; \*SCIENCE EDUCATION; TEACHING GUIDES

IDENTIFIER: ERIC SMEAC

DESCRIPTIVE NOTE: 200P.; FOR VOLUME I, SEE ED 091 172

THIS PUBLICATION IS THE SECOND VOLUME OF TEACHING  
ACTIVITIES IN ENVIRONMENTAL EDUCATION DESIGNED FOR STUDENT  
USE IN GRADES K-12. EACH ACTIVITY HAS BEEN CLASSIFIED BY THE  
EDITORS ACCORDING TO THE MOST APPROPRIATE GRADE LEVEL,  
SUBJECT MATTER, ENVIRONMENTAL CONCEPT INVOLVED, AND  
ENVIRONMENTAL PROBLEM AREA. SUBJECT AREAS ARE SCIENCE,  
MATHEMATICS, SOCIAL STUDIES, LANGUAGE ARTS, AND FINE ARTS;  
THE CONCEPTS INCLUDE BIOPHYSICAL, SOCIOCULTURAL, MANAGEMENT,  
AND CHANGE-ORIENTED CONCEPTS. THE OTHER CLASSIFICATION,  
ENVIRONMENTAL PROBLEM AREAS, INCLUDES AESTHETIC  
CONSIDERATIONS, ECO-COMMUNITY RELATIONSHIPS, AND  
PSYCHOLOGICAL AND BEHAVIORAL CONSIDERATIONS. IN ADDITION TO  
BEING CLASSIFIED IN THESE FOUR CATEGORIES, EACH ACTIVITY  
CONTAINS A STATEMENT OF PURPOSE ON HOW THE ACTIVITY MAY BE  
USED AND A REFERENCE TO A SOURCE WHERE THE ACTIVITY MAY BE  
FOUND IN MORE DETAIL OR WITH VARIATIONS. (AUTHORS/TK)

AVAILABILITY: OHIO STATE UNIVERSITY, CENTER FOR SCIENCE AND  
MATHEMATICS EDUCATION, 244 ARPS HALL, COLUMBUS, OHIO 43210  
(\$4.00)

ACCESSION NUMBER: ED103149

PUBLICATION DATE: 73

TITLE: RELATING OUTDOOR EDUCATION CONCEPTS TO EMOTIONALLY HANDICAPPED CHILDREN AND YOUTH. PROCEEDINGS FROM SIX REGIONAL WORKSHOPS CONDUCTED 1972-73.

DESCRIPTOR: ART; \*CURRICULUM GUIDES; \*ELEMENTARY SECONDARY EDUCATION; \*EMOTIONALLY DISTURBED; LANGUAGE ARTS; MATHEMATICS; MUSIC; \*OUTDOOR EDUCATION; PHYSICAL EDUCATION; \*RESOURCE GUIDES; SCIENCES; SENSORY TRAINING; SOCIAL STUDIES; TEACHER WORKSHOPS

IDENTIFIER: \*NEW YORK

DESCRIPTIVE NOTE: 325P.; SPECIAL STUDIES INSTITUTE FUNDED THROUGH P.L. 91-230; FOR RELATED DOCUMENTS, SEE ED 103 150-157

RESOURCE MATERIAL RELATING OUTDOOR EDUCATION CONCEPTS TO THE EDUCATION OF EMOTIONALLY HANDICAPPED CHILDREN AND YOUTH DISTRIBUTED AT SIX REGIONAL WORKSHOPS (NEW YORK STATE, 1972-73 SCHOOL YEAR) CONSTITUTES THE MAJOR ELEMENT OF THIS REPORT ON WORKSHOP PROCEEDINGS. DETAILED RESOURCE AND/OR CURRICULUM GUIDES PREPARED BY LOCAL WORKSHOP CONSULTANTS ARE PRESENTED INDIVIDUALLY AND COVER THE FOLLOWING EIGHT DISCIPLINES: MATHEMATICS, LANGUAGE ARTS, PHYSICAL EDUCATION, SCIENCE, ART, SOCIAL STUDIES, MUSIC, AND SENSORY AWARENESS. ALSO INCLUDED ARE PROCEEDINGS FROM THE 3-DAY PLANNING WORKSHOP AND THE RESULTING PLANNING GUIDE WHICH WAS DISTRIBUTED TO ALL REGIONAL WORKSHOP PLANNING COMMITTEES. REGIONAL PLANNING COORDINATORS AND CONSULTANTS ARE LISTED BY REGION (LOWER HUDSON AREA, WESTERN NEW YORK AREA, NEW YORK CITY AREA, LONG ISLAND AREA, CENTRAL NEW YORK AREA, OR KINGSTON AREA). (JC)

ACCESSION NUMBER: ED103150

PUBLICATION DATE: 73

TITLE: MATHEMATICS IN THE OUT DOORS .

PERSONAL AUTHOR: BARCUMB, FRANCOIS; AND OTHERS

DESCRIPTOR: ACADEMIC ENRICHMENT; ACTIVITIES; CONCEPT FORMATION; CURRICULUM GUIDES; \*ELEMENTARY SECONDARY EDUCATION; \*EMOTIONALLY DISTURBED; FRACTIONS; GEOMETRY; HEIGHT; MATHEMATICAL CONCEPTS; \*MATHEMATICS; NUMBERS; \*OUTDOOR EDUCATION; \*RESOURCE GUIDES; TEMPERATURE; TIME

DESCRIPTIVE NOTE: 13P.; FOR RELATED DOCUMENTS, SEE ED 103 149; ED 103 151-157

DESIGNED FOR THE INSTRUCTION OF EMOTIONALLY HANDICAPPED CHILDREN AND YOUTH, THIS GUIDE PRESENTS MATHEMATICAL CONCEPTS AND ACTIVITIES WHICH MAY BE UTILIZED IN OUTDOOR EDUCATION. THREE AUTHORS PROVIDE THREE INDIVIDUALIZED RESOURCE GUIDES ON MATHEMATICS; GUIDE 1 DEALS WITH THE CONCEPTS OF MEASUREMENT, TIME, ESTIMATION, GEOMETRY, COUNTING, AND FRACTIONS WHICH ARE CORRELATED WITH OUTDOOR ACTIVITIES. FOR EXAMPLE, THE MEASURING CONCEPT CALLS FOR MEASURING ACREAGE USING STRING, PACING, STUDENTS' BODIES, OR TAPES AND SUGGESTS THAT AREAS TO BE MEASURED INCLUDE WOODS, FIELDS, AND PLAYGROUNDS IN RURAL AREAS AND PARKS, PLAYGROUNDS, AND SHOPPING CENTER PARKING LOTS IN URBAN AREAS. SIMILARLY, GUIDE 2 DEALS WITH SKILLS RELATIVE TO COUNTING, MEASURING, THE BASIC COMPASS, GEOMETRIC FIGURE FINDING, AND TREE RING STUDY FOR THE PRIMARY LEVELS. FOR INTERMEDIATE LEVELS, PROJECTS ARE FOCUSED ON THE USE OF MAPS (PACE MAP MAKING), BALTIMORE STICKS, DIAMETER TAPES, GRAPHS, COMPASSES, RANGER STATIONS (GRID WORK FOR FIRE LOCATING PURPOSES), STREAMS (VOLUME), AND TRIANGULATION FOR VERTICAL DISTANCES AND INACCESSIBLE AREAS. GUIDE 3 PRESENTS 21 SEPARATE ACTIVITIES WHICH INCLUDE SUCH IDEAS AS TREASURE HUNTS (LOOKING FOR SPECIFIC MEASUREMENTS) AND WALKS (LOOKING FOR POSTED NUMERALS, LISTING SHAPES FOUND IN THE NEIGHBORHOOD, AND TAKING AND COMPARING TEMPERATURES FOUND IN DIFFERENT LOCATIONS). (JC)

AVAILABILITY: NOT AVAILABLE SEPARATELY, SEE ED 103 149

ACCESSION NUMBER: ED103151

PUBLICATION DATE: 73

TITLE: LANGUAGE ARTS IN THE OUT DOORS .

PERSONAL AUTHOR: BUDD, CHRIS; AND OTHERS

DESCRIPTOR: ACTIVITIES; CONCEPT FORMATION; DRAMATICS;  
 \*ELEMENTARY SECONDARY EDUCATION; \*EMOTIONALLY DISTURBED;  
 \*LANGUAGE ARTS; LISTENING; MULTISENSORY LEARNING; \*OUTDOOR  
 EDUCATION; PHONETICS; POETRY; READING; \*RESOURCE GUIDES;  
 SELF EXPRESSION; SPEAKING; VOCABULARY DEVELOPMENT #

DESCRIPTIVE NOTE: 53P.; FOR RELATED DOCUMENTS, SEE ED 103  
 149-150; ED 103 152-157

DESIGNED FOR INSTRUCTION OF EMOTIONALLY HANDICAPPED CHILDREN AND YOUTH, THIS GUIDE PRESENTS CONCEPTS AND ACTIVITIES RELATIVE TO LANGUAGE ARTS AND OUTDOOR EDUCATION. RESOURCE MATERIALS DEVELOPED BY 10 DIFFERENT AUTHORS ADDRESS VARIOUS COMMUNICATIVE SKILLS. THE FIRST ARTICLE LISTS 23 SPECIFIC ACTIVITIES DESIGNED TO ENRICH STUDIES IN READING, LISTENING, SPELLING, AND WRITTEN AND ORAL COMMUNICATION. FOCUSING ON READING VIA THE OUTDOOR APPROACH, THE SECOND ARTICLE CAPITALIZES ON USE OF THE ENVIRONMENT TO STIMULATE AND MOTIVATE STUDENT EXPRESSION. FOR EXAMPLE, 1 OF 23 ACTIVITIES CALLS FOR A DESCRIPTION OF A CLOUD FORMATION. LISTING 26 ACTIVITIES, THE THIRD ARTICLE EMPHASIZES THE IMPORTANT RELATIONSHIP BETWEEN THE OUTDOOR EXPERIENCE AND THE DESIRE AND/OR NEED TO COMMUNICATE. DEVOTED TO THE STUDY OF PROSE AND POETRY, THE FOURTH ARTICLE, AMONG OTHER ACTIVITIES, PRESENTS A STEP BY STEP APPROACH TO WRITING HAIKU POEMS. READING AND WRITING ARE EMPHASIZED IN THE FIFTH ARTICLE; ACTIVITIES INCLUDE PERSONIFICATION EXERCISES, THE DEVELOPMENT OF A CINQUAIN POEM, A NATURE HIKE INVOLVING PROGRESSION FROM WORDS AND IMAGES TO FULL SENTENCES, ETC. THE SIXTH ARTICLE LISTS FOUR DETAILED ACTIVITIES DESIGNED TO UTILIZE THE FIVE SENSES, INSTILL CREATIVE EXPRESSION, PROMOTE POETIC EXPRESSION, AND PROVIDE RECORDING OPPORTUNITIES. ARTICLES 7-9 DEAL WITH MULTISENSORY DEVELOPMENT, PRESENTING OVER 100 ACTIVITY SUGGESTIONS. THE LAST ARTICLE IS DEVOTED TO PHONETICS AND ORAL EXPRESSION.  
 (JC)

AVAILABILITY: NOT AVAILABLE SEPARATELY, SEE ED 103 149

ACCESSION NUMBER: ED103152

PUBLICATION DATE: 73

TITLE: PHYSICAL EDUCATION IN THE OUT OF DOORS .

PERSONAL AUTHOR: BARNARD, PETER; AND OTHERS

DESCRIPTOR: ACTIVITIES; CAMPING; CONCEPT FORMATION;  
\*ELEMENTARY SECONDARY EDUCATION; \*EMOTIONALLY DISTURBED;  
FIELD TRIPS; GAMES; HEALTH EDUCATION; MOTIVATION TECHNIQUES;  
MUSCULAR STRENGTH; NUTRITION; \*OUTDOOR EDUCATION; \*PHYSICAL  
EDUCATION; POLLUTION; \*RESOURCE GUIDES; SKILL DEVELOPMENT

DESCRIPTIVE NOTE: 14P.; FOR RELATED DOCUMENTS, SEE ED 103  
149-151; ED 103 153-157

DESIGNED FOR INSTRUCTION OF EMOTIONALLY HANDICAPPED CHILDREN AND YOUTH, THESE TWO ARTICLES DEAL WITH CONCEPTS AND ACTIVITIES OF PHYSICAL AND HEALTH EDUCATION WITH AN OUTDOOR EMPHASIS. OBJECTIVES CITED IN THE FIRST ARTICLE ARE TEACHING YOUNG PEOPLE TO: ENJOY THE OUT-OF-DOORS; COOPERATE WITH OTHERS AND SHARE IN COMMON GOALS; DEVELOP SKILLS FOR COPING WITH UNPLANNED "HAPPENINGS"; DEVELOP LIFETIME SKILLS; INCORPORATE STRENGTH, FLEXIBILITY, ENDURANCE, BALANCE, AGILITY, COORDINATION, PHYSICAL FITNESS, AND PSYCHOLOGICAL AND SOCIAL SECURITY; EXPERIENCE CHALLENGES AND SUCCESSSES; DEVELOP SAFETY HABITS; AND DEVELOP APPRECIATION OF THE OUTDOORS AND ITS CREATURES. WITH EMPHASIS ON MOTIVATION TECHNIQUES, THE FOLLOWING WARM AND WINTER WEATHER ACTIVITIES ARE SUGGESTED: WALKING; HIKING; GAMES; SPORTS; BICYCLING; BOATING; CANOEING; HORSEBACK RIDING; CAMPING; SWIMMING, FISHING, FOLLOWING TRAIL MARKERS; SNOW SHOWING AND SKIING; AND SLIDING OR TOBOGGANING. CURRICULUM AREAS AND SOME CORRESPONDING ACTIVITIES EMPHASIZED IN THE SECOND ARTICLE ON HEALTH EDUCATION ARE: POLLUTION (SITE VISITS); PHYSICAL EDUCATION (MOUNTAIN CLIMBING AND OBSERVATION OF PULSE RATE, FATIGUE, ETC.); SEX EDUCATION; CONSERVATION; HYGIENE (LOCAL HEALTH CLINICS); NUTRITION (FIELD TRIP TO DISCOVER EDIBLE PLANTS); SAFETY EDUCATION; DRUGS; COMMUNICABLE DISEASES; MENTAL HEALTH; AND OVERPOPULATION. (JC)

AVAILABILITY: NOT AVAILABLE SEPARATELY, SEE ED 103 149

ACCESSION NUMBER: ED103153

PUBLICATION DATE: 73

TITLE: SCIENCE IN THE OUTDOORS .

PERSONAL AUTHOR: SARAGE, JOE; AND OTHERS

DESCRIPTOR: ACTIVITIES; ANIMAL SCIENCE; BIOLOGY INSTRUCTION; CONCEPT FORMATION; DISCOVERY LEARNING; EARTH SCIENCE; ECOLOGY; \*ELEMENTARY SECONDARY EDUCATION; \*EMOTIONALLY DISTURBED; ENVIRONMENTAL EDUCATION; MARINE BIOLOGY; NATURAL RESOURCES; \*OUTDOOR EDUCATION; PHYSICS INSTRUCTION; \*RESOURCE GUIDES; RURAL EDUCATION; \*SCIENCES; URBAN TEACHING

DESCRIPTIVE NOTE: 87P.; FOR RELATED DOCUMENTS, SEE ED 103 149-152; ED 103 154-157

DESIGNED FOR INSTRUCTION OF EMOTIONALLY HANDICAPPED CHILDREN AND YOUTH, THIS RESOURCE GUIDE PRESENTS SCIENCE ACTIVITIES AND CONCEPTS RELATIVE TO RURAL AND URBAN OUTDOOR EDUCATION. INCLUDED ARE 25 DIFFERENT ARTICLES, VARYING FROM BROADLY GENERALIZED TO HIGHLY SPECIFIC CONCEPT/ACTIVITY SUGGESTIONS WHICH INCLUDE FILM AND BOOK BIBLIOGRAPHIES AND VOCABULARY LISTS. "HIGH SCHOOL SCIENCE IN THE OUTDOORS" PRESENTS 31 CONCEPT CORRELATED ACTIVITIES RELATIVE TO EARTH SCIENCE, PHYSICS, AND BIOLOGY. AN ARTICLE ON WATER AND ITS IMPORTANCE TO THE ECOLOGICAL SYSTEMS OF THE WORLD FOCUSES ON BASIC CONCEPTS OF THE WATER CYCLE AND PRESENTS ACTIVITIES FOR PRIMARY AND INTERMEDIATE LEVELS. SPECIFIC OBJECTIVES ARE ITEMIZED IN A DETAILED ARTICLE ON SCIENCE FOR K-4, A STUDY OF LIVING THINGS; AIR, WATER, AND WEATHER; AND THE EARTH. DISCOVERY LEARNING IS EMPHASIZED IN SOME 14 BRIEF ARTICLES DESIGNED TO STIMULATE SCIENTIFIC OBSERVATION IN THE YOUNG; SUBJECT AREAS INCLUDE TREES, SOIL, EARTH WORMS, ROCKS, THE SEASONS, A GARDEN (AN INTERDISCIPLINARY APPROACH), BIRDS, AND BIRD FEEDERS. AMONG OTHER ARTICLE TOPICS ARE MANMADE MATERIALS, UNDISCIPLINED NATURE VS ORGANIZED NATURE, "SIDEWALK SCIENCE," DETAILED ACTIVITY SECTION UTILIZING THE URBAN OUTDOORS AND DESIGNATING 35 ACTIVITY PLACES (BUILDINGS), AWARENESS GOALS (STRUCTURE), AND LEARNING GOALS (MATERIALS); SEASHORE ACTIVITIES; AND A CLASSROOM ANIMAL STUDY DESIGNATING 30 ANIMAL TYPES, NECESSARY CONTAINERS, TEMPERATURES, AND FOODS. (JC)

AVAILABILITY: NOT AVAILABLE SEPARATELY, SEE ED 105 149

ACCESSION NUMBER: ED103154

PUBLICATION DATE: 73

TITLE: ART IN THE OUT OF DOORS

PERSONAL AUTHOR: ASHBEE, BARBARA; AND OTHERS

DESCRIPTOR: ACTIVITIES; \*ART EDUCATION; COLOR; CONCEPT FORMATION; \*ELEMENTARY SECONDARY EDUCATION; \*EMOTIONALLY DISTURBED; INTERDISCIPLINARY APPROACH; LIGHT; \*OUTDOOR EDUCATION; \*RESOURCE GUIDES; SENSORY EXPERIENCE

DESCRIPTIVE NOTE: 23P.; FOR RELATED DOCUMENTS, SEE ED 100 149-153; ED 100 155-157

DESIGNED FOR INSTRUCTION OF EMOTIONALLY HANDICAPPED CHILDREN AND YOUTH, SIX ARTICLES DEAL WITH ART CONCEPTS AND ACTIVITIES RELATIVE TO OUTDOOR EDUCATION. PRESENTING OVER 100 ACTIVITY SUGGESTIONS, THE FIRST ARTICLE EMPHASIZES ART IN NATURE AND STATES SEVEN OBJECTIVES WHICH POINT TOWARD CREATIVE DEVELOPMENT OF SUCH CONCEPTS AS COLOR VALUE, TWO DIMENSIONAL SURFACES, PERSPECTIVE, LINE, SHAPE, VOLUME, LIGHT, AND TEXTURE. THE SECOND ARTICLE PRESENTS 28 ACTIVITIES AND EMPHASIZES THE IMPORTANCE OF PROVIDING EMOTIONALLY HANDICAPPED CHILDREN WITH THE SECURITY NECESSARY FOR CREATIVE ACTIVITIES. DEVELOPING AN ART CURRICULUM IN THE OUTDOORS CONSTITUTES THE FOCUS OF THE THIRD ARTICLE WHICH POINTS OUT THE FACILITY WITH WHICH MATERIALS AND ENTHUSIASM MAY BE GENERATED IN THE OUTDOORS. FOR EXAMPLE, 1 OF 23 ACTIVITIES CALLS FOR DEVELOPING ABSTRACT PATTERNS FROM STUDY OF A KNOT HOLE IN A PIECE OF WOOD. WITH EMPHASIS ON AN INTERDISCIPLINARY APPROACH, THE FOURTH ARTICLE PRESENTS THREE SIMPLE, BRIEF, AND RELEVANT LESSON PLANS DESIGNED TO PRODUCE IMMEDIATE SUCCESS. IN A DISCUSSION OF PROGRESSIVELY SOPHISTICATED ART ACTIVITIES, THE FIFTH ARTICLE EMPHASIZES THE IMPORTANCE OF CONTROLS WHICH ENHANCE PERSONAL SECURITY, ON THE SPOT MATERIAL DEMONSTRATIONS, AND IMMEDIATE SUCCESS. PROMOTING AN INDIGENOUS PROGRAM, THE SIXTH ARTICLE DETAILS OUTDOOR AREAS OF STUDY WITH DERIVATIVE CONCEPTS AND INTERDISCIPLINARY ACTIVITIES. (JC)

AVAILABILITY: NOT AVAILABLE SEPARATELY, SEE ED 103 149

ACCESSION NUMBER: ED103155

PUBLICATION DATE: 73

TITLE: SOCIAL STUDIES IN THE OUT OF DOORS

PERSONAL AUTHOR: HUCHRO, JOHN; FISCH, TOM

DESCRIPTOR: ACTIVITIES; AMERICAN HISTORY; CONCEPT FORMATION; DISCOVERY LEARNING; \*ELEMENTARY SECONDARY EDUCATION; \*EMOTIONALLY DISTURBED; ENVIRONMENTAL EDUCATION; INTERDISCIPLINARY APPROACH; \*OUTDOOR EDUCATION; \*RESOURCE GUIDES; SOCIAL PROBLEMS; SOCIAL RELATIONS; \*SOCIAL STUDIES; SOCIAL SYSTEMS

DESCRIPTIVE NOTE: 18P.; FOR RELATED DOCUMENTS, SEE ED 100 149-154; ED 100 156-157

DESIGNED FOR INSTRUCTION OF EMOTIONALLY HANDICAPPED CHILDREN AND YOUTH, THESE SIX ARTICLES PRESENT CONCEPTS AND ACTIVITIES RELATIVE TO SOCIAL STUDIES AND OUTDOOR EDUCATION. DEFINING SOCIAL STUDIES AS THE STUDY OF MAN AND HIS RELATIONSHIP WITH HIS ENVIRONMENT, THE FIRST ARTICLE EMPHASIZES A SITE ANALYSIS APPROACH. ACTIVITY SUGGESTIONS UTILIZE A CAMP, A CEMETERY, A CITY HALL, A DAIRY OR DESERTED FARM, A HIGHWAY, A PAPER MILL OR ANY INDUSTRY, ETC. THE SECOND ARTICLE LISTS "EXPERIENCES" WHICH THE OUTDOOR SETTING MAY OFFER (E.G., DEVELOPING INITIATIVE IN MAKING CHOICES) AND LISTS 33 ACTIVITY SUGGESTIONS (E.G., THE STUDY OF TOP SOIL AND MAN'S INFLUENCE). CONSIDERING THE NEEDS OF EMOTIONALLY HANDICAPPED STUDENTS, THE THIRD ARTICLE PRESENTS 10 ACTIVITIES WHICH CAN BE ACCOMPLISHED WITHIN WALKING DISTANCE OF MOST NEIGHBORHOOD SCHOOLS (E.G., VISITING A BANK AND DISCUSSING MEDIUMS OF EXCHANGE). IN AN ATTEMPT TO MAKE HISTORY ACHIEVE "HEIGHTENED VITALITY," THE FOURTH ARTICLE PRESENTS TWO DETAILED LESSON PLANS (DEVELOPED AROUND AN OLD CEMETERY) WHICH DEAL WITH THE CONCEPT OF TIME. FOCUSING ON THE "SOCIAL" ASPECTS OF MAN AND HIS NEED FOR INTERACTION, THE FIFTH ARTICLE ARGUES FOR REALISTIC STUDIES UTILIZING INTERDISCIPLINARY APPROACHES. THE SIXTH ARTICLE EMPHASIZES THE VALUE OF "DOING" IN A DETAILED STUDY OF COLONIAL LIFE. ACTIVITY SUGGESTIONS INCLUDE MAKING FURNITURE, QUILTS, AND EARLY FOODS. (JC)

AVAILABILITY: NOT AVAILABLE SEPARATELY, SEE ED 103 149

ACCESSION NUMBER: ED103156

PUBLICATION DATE: 73

TITLE: MUSIC IN THE OUT OF DOORS

PERSONAL AUTHOR: DUGGAN, EDWARD; AND OTHERS

DESCRIPTOR: ACTIVITIES; CONCEPT FORMATION; DANCE;  
 DRAMATICS; \*ELEMENTARY SECONDARY EDUCATION; EMOTIONAL  
 EXPERIENCE; \*EMOTIONALLY DISTURBED; INTERDISCIPLINARY  
 APPROACH; MOTIVATION TECHNIQUES; MUSICAL COMPOSITION;  
 MUSICAL INSTRUMENTS; \*MUSIC EDUCATION; \*OUTDOOR EDUCATION;  
 \*RESOURCE GUIDES; SINGING

DESCRIPTIVE NOTE: 25P.; FOR RELATED DOCUMENTS, SEE ED 100  
 149-155; ED 100 157

DESIGNED FOR INSTRUCTION OF EMOTIONALLY HANDICAPPED CHILDREN AND YOUTH, THESE SEVEN ARTICLES OFFER ACTIVITIES AND CONCEPTS RELATIVE TO MUSIC AND OUTDOOR EDUCATION. THE FIRST ARTICLE PRESENTS 12 SPECIFIC OBJECTIVES AND 40 SPECIFIC ACTIVITIES (E.G., ACTION SINGING USING MOTIONS TO DESCRIBE WORDS). THE SECOND ARTICLE PRESENTS THREE BASIC CONCEPTS CENTERING ON THE USE OF MUSIC IN MANMADE AND NATURAL ENVIRONMENTS AS AN AID TO THE EMOTIONALLY HANDICAPPED STUDENT IN GAINING ACCESS TO HIS EMOTIONS. EMPHASIZING CREATIVE MOVEMENT IN THE FREEDOM OF THE OUTDOORS, THE THIRD ARTICLE PRESENTS 15 OUTDOOR ACTIVITIES (E.G., TAPING FAVORITE SINGERS AND PRESENTING AN OUTDOOR "WOODSTOCK" TYPE CONCERT STARRING STUDENTS). THE FOURTH ARTICLE DEALS WITH NATURE SOUNDS AND PRESENTS DETAILED LISTENING ACTIVITIES, RHYTHM OBSERVATIONS (E.G., BIRDS IN FLIGHT), SOUND AND MOVEMENT GAMES, AND NATURAL INSTRUMENT CREATIONS (E.G., A COCONUT DRUM). IDENTIFYING THE EMOTIONALLY HANDICAPPED AS "OUT OF RHYTHM WITH THE WORLD AND SOMETIMES WITH THEMSELVES," THE FIFTH ARTICLE EMPHASIZES RHYTHM DISCOVERY VIA LISTENING, COMPOSITION, AND MOVEMENT ACTIVITIES. UTILIZING AN INTERDISCIPLINARY APPROACH, THE SIXTH ARTICLE FOCUSES ON SOUND SENSITIVITY VIA LISTENING, INSTRUMENT MAKING, AND COMPOSING ACTIVITIES. THE SEVENTH ARTICLE DEALS WITH CREATIVE DRAMATICS USED AS AN INTERDISCIPLINARY CURRICULUM TOOL AND AS A TECHNIQUE FOR DEVELOPING FREE EXPRESSION, SOCIALIZATION, AND POSITIVE REINFORCEMENT. (JC)

AVAILABILITY: NOT AVAILABLE SEPARATELY, SEE ED 103 149.

ACCESSION NUMBER: ED103157

PUBLICATION DATE: 73

TITLE: SENSORY AWARENESS THROUGH OUTDOOR EDUCATION

PERSONAL AUTHOR: FARQUHAR, CARIN; AND OTHERS

DESCRIPTOR: ACTIVITIES; AUDITORY PERCEPTION; CONCEPT FORMATION; DEVELOPMENTAL TASKS; DISCOVERY LEARNING; \*ELEMENTARY SECONDARY EDUCATION; \*EMOTIONALLY DISTURBED; \*OUTDOOR EDUCATION; PHOTOGRAPHY; \*RESOURCE GUIDES; \*SENSORY EXPERIENCE; TACTUAL PERCEPTION; VISUAL PERCEPTION

IDENTIFIER: \*PIAGET (JEAN)

DESCRIPTIVE NOTE: 33P.; FOR RELATED DOCUMENTS, SEE ED 100 149-156

DESIGNED FOR INSTRUCTION OF EMOTIONALLY HANDICAPPED CHILDREN AND YOUTH, THESE SEVEN ARTICLES PRESENT CONCEPTS AND ACTIVITIES RELATIVE TO SENSORY AWARENESS AND OUTDOOR EDUCATION. THE FIRST ARTICLE PRESENTS DEFINITIONS, CONCEPTS, DETAILED METHODOLOGY, AND OVER 50 ACTIVITIES DESIGNED TO CREATE AWARENESS OF MAN'S FIVE SENSES. UTILIZING THE ART OF PHOTOGRAPHY FOR PURPOSES OF ELICITING SENSORY AWARENESS, THE SECOND ARTICLE PRESENTS 10 INEXPENSIVE PHOTOGRAPHY RELATED ACTIVITIES. A BRIEF ARTICLE ON THE VALUE OF A MULTISENSORY WALK EMPHASIZES THE NEED FOR SPECIFIC SENSORY TRAINING AND OFFERS TRAINING SUGGESTIONS. UTILIZING PIAGET'S DEVELOPMENTAL PROTOCOLS AND EXPERIMENTS AS A TOOL IN EDUCATION OF THE EMOTIONALLY HANDICAPPED, THE FOURTH ARTICLE PRESENTS PIAGETIAN ORIENTED OUTDOOR ACTIVITIES (ONE-TO-ONE CORRESPONDENCE, QUANTITATIVE SIMILARITY SERIATION, ORDINATION AND CARDINATION, FLOATING, CONSTRUCTION OF A STRAIGHT LINE, COORDINATION OF PERSPECTIVES, AND MOVEMENT (CLOUDS, WIND, AND MOON). BACKGROUND FOR ACTIVITIES IS ALSO INCLUDED IN THIS ARTICLE SO THAT THE TEACHER MAY BETTER FACILITATE A SMOOTH TRANSITION FROM THE CLASSROOM TO THE OUTDOORS. THE FIFTH ARTICLE DEALS WITH ANT COLLECTING AND THE CONSTRUCTION OF AN ANT FARM. SIMILARLY, THE SIXTH ARTICLE DEALS WITH TERRARIUMS, AND THE FINAL ARTICLE IS A BRIEF LESSON ON CLOSE EXAMINATION OF A VERY SMALL PLOT OF GROUND. (JC)

AVAILABILITY: NOT AVAILABLE SEPARATELY, SEE ED 103 149

ACCESSION NUMBER: ED103158

PUBLICATION DATE: 17 MAR 75

TITLE: INTEGRATION OF OUTDOOR EDUCATION INTO THE JUNIOR COLLEGE PHYSICAL EDUCATION CURRICULUM.

PERSONAL AUTHOR: WOLFE, JAMES E.

DESCRIPTOR: ACTIVITIES; \*COLLEGE CURRICULUM; ENRICHMENT ACTIVITIES; \*INTEGRATED CURRICULUM; \*JUNIOR COLLEGES; LEARNING EXPERIENCE; \*OUTDOOR EDUCATION; \*PHYSICAL EDUCATION; PROGRAM DESCRIPTIONS

DESCRIPTIVE NOTE: 16P.; PAPER PRESENTED AT THE ANNUAL MEETING OF THE AAHPER (ATLANTIC CITY, NEW JERSEY, MARCH 1975)

MANY EDUCATORS ARE SEEKING TO USE THE OUT-OF-DCCRS TO ENRICH THE EDUCATIONAL EXPERIENCE. OUTDOOR EDUCATION IS BEING USED AS AN EDUCATIONAL EXPERIENCE RELATED TO AND INVOLVED WITH ALL SEGMENTS OF THE CURRICULUM. THE RAPID GROWTH OF THE JUNIOR/COMMUNITY COLLEGE HAS RESULTED IN AN INCREASE IN THE VARIETY AND NUMBER OF PHYSICAL EDUCATION PROGRAMS (BOTH REQUIRED AND ELECTIVE) WHICH ARE HELPING TO EDUCATE STUDENTS TO LOVE, ENJOY, CARE FOR THE OUTDOORS AND PRESERVE THE PHYSICAL ENVIRONMENT. SURVEY QUESTIONNAIRES WERE SENT TO 113 2-YEAR COLLEGES LISTED BY THE BLUE BOOK OF JUNIOR COLLEGE ATHLETICS FOR CONNECTICUT, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, PENNSYLVANIA, RHODE ISLAND, AND VERMONT. OF THE 67 RESPONSES, 49 OFFERED PROGRAMS IN OUTDOOR EDUCATION. THIS SURVEY INDICATED CURRENT DEVELOPMENTS IN COLLEGE EDUCATION AND ORGANIZATIONAL PATTERNS OF COLLEGE SYSTEMS UTILIZING A VARIETY OF OUTDOOR EDUCATION ACTIVITIES IN THEIR PHYSICAL EDUCATION AND RECREATIONAL PROGRAMS. FOR EXAMPLE, AT DEAN JUNIOR COLLEGE, ACTIVITIES ARE PRESENTED AS PART OF AN ELECTIVE GENERAL SERVICE PROGRAM FOR NONMAJORS WITH SKILL AND TECHNIQUE COURSES FOR PHYSICAL EDUCATION AND RECREATION MAJORS. FEES, TRANSPORTATION, INSTRUCTION, FACILITIES, AND PUBLICITY WERE ALSO CONSIDERED FOR THE GENERAL IMPLEMENTATION OF OUTDOOR EDUCATIONAL ACTIVITIES. (NQ)

ACCESSION NUMBER: ED103185

PUBLICATION DATE: 13 FEB 74

TITLE: THE PROCEEDINGS OF THE NORTH AMERICAN CONFERENCE ON /  
OUTDOOR PURSUITS IN HIGHER EDUCATION (1ST, APPALACHIAN STATE  
UNIVERSITY, BOONE, NORTH CAROLINA, FEBRUARY 10-13, 1974).

PERSONAL AUTHOR: SMATHERS, KEENER, ED.

DESCRIPTOR: ATTITUDES; CONFERENCE REPORTS; \*EDUCATIONAL  
DEVELOPMENT; EDUCATIONAL FINANCE; \*EDUCATIONAL OBJECTIVES;  
ENVIRONMENT; \*EXPERIMENTAL PROGRAMS; \*HIGHER EDUCATION;  
LEADERSHIP; MEASUREMENT; METHODS; \*OUTDOOR EDUCATION; SELF  
CONCEPT; SMALL GROUP INSTRUCTION

DESCRIPTIVE NOTE: 39P.

IN FEBRUARY OF 1974, 135 REPRESENTATIVES OF 40 COLLEGES AND  
UNIVERSITIES FROM THE U.S. AND CANADA MET FOR THE FIRST TIME  
TO SHARE EXPERIENCES AND PROGRAMS RELATIVE TO EXPERIMENTAL  
OUTDOOR EDUCATION, AND THESE CONFERENCE PROCEEDINGS CONTAIN  
THE 7 MAJOR ADDRESSES AND A CONDENSED SAMPLING OF OTHER  
PRESENTATIONS FROM INDIVIDUAL COLLEGE PROGRAMS. CONFERENCE  
AIMS WERE DESCRIBED AS DEVELOPING WAYS AND MEANS FOR  
BEGINNING EXPERIMENTAL EDUCATION PROGRAMS; ELEVATING THE  
REPUTATION OF EXPERIMENTAL EDUCATION IN ACADEMIC CIRCLES;  
PAVING THE WAY FOR OUTWARD BOUND CREDIT COURSES; AND  
DEVELOPING A NATIONAL OUTDOOR EXPERIMENTAL EDUCATION  
ORGANIZATION. PAPERS FOCUSED ON MEANS, ENDS, MEASUREMENT,  
AND FINANCE OF OUTDOOR EXPERIMENTAL EDUCATION PROGRAMS.  
MEANS EMPHASIZED WERE: (1) ENVIRONMENT CONTRAST; (2)  
PHYSICAL ACTIVITY; (3) THE INTENTIONAL USE OF STRESS; (4) A  
SMALL GROUP CONTEXT; AND (5) THE EMPLOYMENT OF NEWLY  
ACQUIRED KNOWLEDGE AND SKILLS. MAJOR GOALS WERE IDENTIFIED  
AS (1) ENHANCING SELF-CONCEPTS; (2) UNDERSTANDING THE SELF,  
WITH SPECIAL EMPHASIS ON IDENTIFICATION OF STRENGTHS; (3)  
REORIENTATION TOWARD AESTHETIC APPRECIATION AND  
ENVIRONMENTAL AWARENESS; (4) AN UNDERSTANDING OF LEADERSHIP,  
THE USE OF AUTHORITY AND FOLLOWERSHIP; AND (5)  
INTERNALIZATION. (JC)

AVAILABILITY: OFFICE OF OUTDOOR PROGRAMS, APPALACHIAN STATE  
UNIVERSITY, BOONE, NORTH CAROLINA 28608 (\$2.00)

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ACCESSION NUMBER: ED103198

PUBLICATION DATE: 20 DEC 72

TITLE: A GUIDE TO ESTABLISHING ENVIRONMENTAL EDUCATION PROGRAMS IN MUNICIPAL PARKS.

PERSONAL AUTHOR: BRADLEY, KENNETH; STANLEY, ROBERT

DESCRIPTOR: CONSERVATION EDUCATION; CURRICULUM GUIDES; EDUCATIONAL FACILITIES; \*ENVIRONMENTAL EDUCATION; \*NATURAL RESOURCES; OUTDOOR EDUCATION; \*PARKS; PROGRAM GUIDES; PROGRAM PLANNING; RECREATIONAL FACILITIES; \*SCIENCE EDUCATION; \*URBAN ENVIRONMENT

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; MASSACHUSETTS; SPRINGFIELD

DESCRIPTIVE NOTE: 17P.

THIS GUIDE IS DESIGNED TO HELP THOSE IN THE FIELD OF PARKS AND RECREATION WHO WISH TO DEVELOP AN ENVIRONMENTAL LEARNING PROGRAM IN THEIR PARKS WITH THE COOPERATION OF THE LOCAL SCHOOLS. THE GUIDE REVIEWS AN ENVIRONMENTAL LEARNING PROGRAM WHICH WAS DEVELOPED IN FOREST PARK, SPRINGFIELD (MASSACHUSETTS), AND PROVIDES GUIDELINES WHICH COULD BE CONSIDERED IN THE ESTABLISHMENT OF A SIMILAR ENVIRONMENTAL PROGRAM WITHIN A MUNICIPAL PARK. THE GUIDELINES ARE DESIGNED TO FACILITATE THE INDIVIDUAL NEEDS OF ANY PARTICULAR COMMUNITY; THEY ARE NOT STEP-BY-STEP DIRECTIVES. THE GUIDE COVERS SUCH TOPICS AS PHILOSOPHY AND OBJECTIVES, ESTABLISHMENT OF A PROGRAM, CURRICULUM, PERSONNEL, FUNDING, LEGALITIES, EVALUATION, AND RESOURCES. EACH TOPIC IS DEALT WITH IN GENERAL TERMS, FOLLOWED BY A SPECIFIC EXAMPLE FROM THE SPRINGFIELD PROGRAM. (TK)

ACCESSION NUMBER: ED103219

PUBLICATION DATE: 73

TITLE: NATURAL RESOURCES ACTIVITY GUIDE. BULLETIN NO. 1232.

DESCRIPTOR: ELEMENTARY GRADES; \*ENVIRONMENTAL EDUCATION;  
\*INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; \*NATURAL  
RESOURCES; \*OUTDOOR EDUCATION; ROLE PLAYING; SCIENCE  
EDUCATION; SECONDARY GRADES; SIMULATION

DESCRIPTIVE NOTE: 128P.

OVER THE PAST 50 YEARS THE U.S. POPULATION HAS SHIFTED FROM RURAL TO URBAN AREAS. MOST OF THE STUDENTS IN U.S. SCHOOLS TODAY LIVE IN URBAN ENVIRONMENTS. AS A RESULT OF THIS, MOST STUDENTS HAVE LITTLE KNOWLEDGE OF NATURAL RESOURCES AND THEIR MANAGEMENT. SINCE THESE STUDENTS ARE THE FUTURE DECISION-MAKERS OF THE COUNTRY, IT IS IMPORTANT THAT THEY HAVE AN UNDERSTANDING OF THE ENVIRONMENT AND ITS INTERACTION WITH ALL FACTORS, NATURAL OR MAN-MADE. IT IS BECAUSE OF THIS CONCERN FOR THE FUTURE THAT THIS ACTIVITY GUIDE WAS DEVELOPED. THE ACTIVITIES IN THE GUIDE INCLUDE A VARIETY OF DISCIPLINES INCLUDING SCIENCE, MATH, ART, COMMUNICATIONS, AND SOCIAL STUDIES. DESIGNED FOR TEACHERS, THE GUIDE INCLUDES A RATIONALE FOR THE PROCESS AND PROBLEM-SOLVING APPROACH TO LEARNING THAT IS USED IN THESE ACTIVITIES, AND GIVES A DETAILED EXPLANATION AS TO ITS MOST EFFECTIVE USAGE IN THE DEVELOPMENT OF LESSON PLANS. MOST OF THE ACTIVITIES, WITH SOME MODIFICATION, CAN BE ADAPTED FOR MOST GRADE LEVELS, THOUGH THEY ARE APPROPRIATE FOR OLDER STUDENTS IN ORIGINAL FORM. ROLE-PLAYING ACTIVITIES AND A SIMULATION GAME ARE INCLUDED. A BIBLIOGRAPHY AND MATERIALS LIST ARE GIVEN IN THE BACK OF THE GUIDE. (MA)

ACCESSION NUMBER: ED103220

PUBLICATION DATE: NOV 73

TITLE: LITTLE TALBOT ISLAND: A RESOURCE FOR DEVELOPING FIELD STUDIES. RESOURCE MONOGRAPH NO. 3.

PERSONAL AUTHOR: WEST, FELICIA E.

DESCRIPTOR: BEHAVIORAL OBJECTIVES; ECOLOGY; EDUCATIONAL PROGRAMS; ENVIRONMENT; \*ENVIRONMENTAL EDUCATION; \*FIELD STUDIES; INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; NATURAL RESOURCES; \*OUTDOOR EDUCATION; RESOURCE MATERIALS; \*TEACHING GUIDES

IDENTIFIER: \*FLORIDA

DESCRIPTIVE NOTE: 75P.

THESE RESOURCE MATERIALS HAVE BEEN DEVELOPED TO PROVIDE INSERVICE TEACHERS WITH ENCOURAGEMENT AND ASSISTANCE FOR FIELD STUDIES AND IN THE USE OF THEIR COMMUNITIES' RESOURCES. THE SUBJECT OF THIS MONOGRAPH IS LITTLE TALBOT ISLAND STATE PARK ON FLORIDA'S NORTHEAST COAST. THIS GUIDE PRESENTS GEOLOGICAL BACKGROUND INFORMATION ON THE AREA, SUGGESTED ACTIVITIES FOR STUDY IN SEVERAL CURRICULUM AREAS, SAFETY FACTORS TO BE CONSIDERED, AND MAPS AND ROUTES. INFORMATION CONSIDERED BENEFICIAL TO TEACHERS AS THEY PLAN TO VISIT THESE AREAS IS ALSO INCLUDED. THE APPENDIX INCLUDES A TEACHER TRIP EVALUATION FORM, A STUDENT TRIP EVALUATION FORM, A STUDENT FIELD GUIDE, AND BEHAVIORAL OBJECTIVES AND ACTIVITIES. (BT)

AVAILABILITY: P. K. YONGE LABORATORY SCHOOL, UNIVERSITY OF FLORIDA, COLLEGE OF EDUCATION, GAINESVILLE, FLORIDA 32611 (NO PRICE QUOTED)

ACCESSION NUMBER: ED103222

PUBLICATION DATE: AUG 72

TITLE: AN ENVIRONMENTAL EDUCATION PROGRAM BASED UPON A  
COMMUNITY ORGANIC GARDEN. FINAL REPORT.

PERSONAL AUTHOR: KOPPER, WILLIAM D.

DESCRIPTOR: CONSERVATION EDUCATION; \*ENVIRONMENTAL  
EDUCATION; \*HORTICULTURE; NATURAL RESOURCES; \*OUTDOOR  
EDUCATION; \*REPORTS; SCHOOL COMMUNITY PROGRAMS; SCIENCE  
EDUCATION

IDENTIFIER: \*GARDENING; MICHIGAN

DESCRIPTIVE NOTE: 215P.; MARGINAL LEGIBILITY

ANN ARBOR ECOLOGY CENTER'S COMMUNITY ORGANIC GARDEN  
REPRESENTS A DIFFERENT APPROACH TO ENVIRONMENTAL EDUCATION.  
THE PROJECT HELPED WITH THE DEVELOPMENT OF PROGRAMS WHICH  
ACHIEVED A NUMBER OF GOALS INCLUDING: (1) MIXING STUDENTS  
AND CITIZENS IN A WORKING/SOCIAL SITUATION, (2) TEACHING  
ENVIRONMENTAL PRINCIPLES THROUGH THE EXPERIENCE OF  
GARDENING, AND (3) PROVIDING OPPORTUNITIES FOR URBAN PEOPLE  
TO RELATE TO NATURE IN A WAY THAT WENT BEYOND THE DEMANDS OF  
TECHNOLOGICAL SOCIETY. ORGANIC GARDENS ARE SEEN TO HAVE A  
POTENTIAL FOR BECOMING AN IMPORTANT FORM OF ENVIRONMENTAL  
EDUCATION AND A FORCE FOR CHANGE IN THE COUNTRY. THIS REPORT  
INCLUDES A NUMBER OF APPENDIXES THAT OUTLINE THE SCOPE OF  
THE PROGRAM, PUBLICITY GIVEN, AND PHOTOGRAPHS OF THE SITE.  
(AUTHOR/MA)

AVAILABILITY: ERIC/SMEAC, THE OHIO STATE UNIVERSITY, 400  
LINCOLN TOWER, COLUMBUS, OHIO 43210 (ON LOAN)

ACCESSION NUMBER: ED103226

PUBLICATION DATE: SEP 73

TITLE: ENVIRONMENTAL EDUCATION RESOURCES AND PROGRAMS.

PERSONAL AUTHOR: EWERT, WILLIAM B.; MERRIAM, DEWOLF

DESCRIPTOR: ANNOTATED BIBLIOGRAPHIES; COLLEGE PROGRAMS;  
CONSERVATION EDUCATION; \*EDUCATIONAL PROGRAMS; ELEMENTARY  
GRADES; \*ENVIRONMENTAL EDUCATION; OUTDOOR EDUCATION;  
PERIODICALS; READING MATERIALS; \*RESOURCE MATERIALS;  
SECONDARY GRADES; \*STATE PROGRAMS

IDENTIFIER: \*NEW HAMPSHIRE

DESCRIPTIVE NOTE: 45P.; ADDENDUM NUMBER TWO TO ED 100 224.  
SEE ED 100 225 FOR ADDENDUM NUMBER ONE

THIS DOCUMENT, DEVELOPED FOR THE STATE OF NEW HAMPSHIRE, IS  
DESIGNED TO HELP INDIVIDUALS, SCHOOLS, AND COMMUNITIES GET  
STARTED IN THE DEVELOPMENT AND IMPLEMENTATION OF  
ENVIRONMENTAL EDUCATION PROGRAMS BY PROVIDING LISTS OF NEW  
HAMPSHIRE ENVIRONMENTAL EDUCATION PROGRAMS AND RESOURCE  
MATERIALS. THE FOLLOWING ARE LISTED IN THIS PUBLICATION: THE  
PUBLICATIONS OF THE ENVIRONMENTAL EDUCATION PLANNING  
COUNCIL; ELEMENTARY AND SECONDARY ENVIRONMENTAL EDUCATION  
PROGRAMS; RESOURCE TEACHERS AND PEOPLE; COLLEGE PROGRAMS;  
PLACES FOR FIELD TRIPS; SCHOOL CAMPING; SUMMER YOUTH  
PROGRAMS; CURRICULUM MATERIALS; ENVIRONMENTAL EDUCATION  
BIBLIOGRAPHIES AND FILM LISTS; NEW HAMPSHIRE FILM SOURCES;  
PERIODICALS; A SELECTED READING LIST; AND AGENCIES AND  
ORGANIZATIONS ON THE STATE, PRIVATE, AND NATIONAL LEVEL  
WHICH OFFER TRAINING, ASSISTANCE AND INFORMATION. (BT)

ACCESSION NUMBER: ED103228

PUBLICATION DATE: 73

TITLE: SAVE OUR WATER RESOURCES.

PERSONAL AUTHOR: BROMLEY, ALBERT W.

DESCRIPTOR: BIOLOGICAL SCIENCES; CONSERVATION EDUCATION;  
ECOLOGY; ENVIRONMENT; ENVIRONMENTAL EDUCATION;  
\*INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; \*NATURAL  
RESOURCES; OUTDOOR EDUCATION; POLLUTION; SCIENCE EDUCATION;  
SECONDARY GRADES; \*STUDENT PROJECTS; \*WATER POLLUTION  
CONTROL; \*WATER RESOURCES

IDENTIFIER: PROJECT SOAR

DESCRIPTIVE NOTE: 32P.

THE PURPOSE OF THIS BOOKLET, DEVELOPED AS PART OF PROJECT SOAR (SAVE OUR AMERICAN RESOURCES), IS TO GIVE SCOUT LEADERS SOME FACTS ABOUT THE WORLD'S RESOURCES, THE SOURCES OF WATER POLLUTION, AND HOW PEOPLE CAN HELP IN OBTAINING SOLUTIONS. AMONG THE TOPICS DISCUSSED ARE THE WORLD'S WATER RESOURCES, THE WATER CYCLE, WATER QUALITY, SOURCES OF WATER POLLUTION, THE NEED FOR OXYGEN, AND TYPES OF WATER POLLUTION (SUCH AS SILTATION, SEWAGE, ORGANIC WASTES, PLANT NUTRIENTS, MINERAL SUBSTANCES AND SALTS, RADIOACTIVE SUBSTANCES, AND THERMAL POLLUTION). METHODS OF PRESERVING OUR WATER RESOURCES FOR THE FUTURE ARE DISCUSSED. LEARNING OBJECTIVES FOR WATER QUALITY PROJECTS, WATER SUPPLY PROJECTS, AND WATER CONSERVATION PROJECTS ARE INCLUDED. A LIST OF STUDENT PROJECTS RELATING TO WATER QUALITY, MARINE WATERS, FISH BIOLOGY, AND FISH CONSERVATION IS APPENDED. (BT)

ACCESSION NUMBER: ED103241

PUBLICATION DATE: 72

TITLE: NATURE HUNT, AN ENVIRONMENTAL UNIT

DESCRIPTORS: ECLOGY; ELEMENTARY SCHOOL; ENVIRONMENTAL  
 \*ENVIRONMENTAL EDUCATION; INVESTIGATIONS; LEARNING SCIENCES; OUTDOOR  
 INVESTIGATIONS; PLANNING SCIENCES; PRIMARY EDUCATION; RESEARCH  
 OUTDOOR EDUCATION; PRIMARY EDUCATION; RESEARCH  
 TEACHING GUIDES

DESCRIPTIVE NOTE: 179-1 RELATED DOCUMENTS  
 233-253

THIS ENVIRONMENTAL UNIT IS THE FIRST OF A SERIES OF UNITS IN THE  
 INTEGRATION WITHIN THE FIELD. THE UNIT IS  
 SELF-CONTAINED AND REQUIRES LITTLE TEACHING. THE  
 PHILOSOPHY OF THE UNIT IS BASED ON THE CONCEPT OF THE  
 PROCESS THAT ENCOURAGES SELF-PAID EXPERIMENTATION.  
 IN THIS UNIT, YOUNG PRIMARY SCHOOL CHILDREN WILL BE ENCOURAGED  
 TO EXPLORE A NATURAL AREA THROUGH THE USE OF  
 WORK IN SMALL GROUPS TO OBSERVE, RECORD, AND  
 COMMUNICATE THEIR DISCOVERIES. THE UNIT IS  
 AS A GAME. STUDENTS ARE GIVEN CONCEPTS OF  
 COLLECTED FROM THE AREA AND WITH THE HELP OF  
 REPRESENTATIVE SITES IN THE AREA, THEY WILL  
 AND COLLECT ITEMS SIMILAR TO THOSE IN THE  
 IDENTIFY THE AREAS IN THE ENVIRONMENT.  
 BROUGHT BACK TO THE CLASSROOM AND THE  
 INFORMATION FOR TEACHERS INCLUDES A LIST OF  
 NEEDED, DIRECTIONS FOR THE ACTIVITIES, AND  
 PREPARATIONS. (MA)

AVAILABILITY: NATIONAL BUREAU OF EDUCATION,  
 STREET, N.W. WASHINGTON, D.C. 20540 (PHONE  
 \$1.00)

ACCESSION NUMBER: ED103243

PUBLICATION DATE: 71

TITLE: OAKS, ACORNS, CLIMATE AND SQUIRRELS, AN ENVIRONMENTAL INVESTIGATION.

DESCRIPTOR: ELEMENTARY GRADES; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; INVESTIGATIONS; \*LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR EDUCATION; \*PLANT GROWTH; PRIMARY EDUCATION; \*SCIENCE EDUCATION; TEACHING GUIDES

IDENTIFIER: OAK TREES; \*PLANTS

DESCRIPTIVE NOTE: 25P.; RELATED DOCUMENTS: SEE ED 103 233-253

THIS ENVIRONMENTAL UNIT IS ONE OF A SERIES DESIGNED FOR INTEGRATION WITHIN AN EXISTING CURRICULUM. THE UNIT IS SELF-CONTAINED AND REQUIRES MINIMAL TEACHER PREPARATION. THE PHILOSOPHY OF THE UNITS IS BASED ON AN EXPERIENCE-ORIENTED PROCESS THAT ENCOURAGES SELF-PACED INDEPENDENT STUDENT WORK. IN THIS PARTICULAR UNIT, OAKS AND ACORNS ARE THE VEHICLE BY WHICH PRIMARY SCHOOL CHILDREN DISCOVER THE INTERRELATIONSHIPS OF ORGANISMS IN THEIR ENVIRONMENT. THE UNIT IS DIVIDED INTO FOUR PARTS. IN THE FIRST PART, STUDENTS WORK OUTSIDE TO COLLECT AND PLANT ACORNS AND TO OBSERVE THEIR DEVELOPMENT INTO SEEDLINGS. NEXT, THE STUDENTS DETERMINE WHEN ACORNS FALL FROM THE TREES AND DISCOVER THE LARVAE LIVING INSIDE THEM. IN THE THIRD PART, THE ROLE OF SQUIRRELS IS STUDIED IN RELATION TO THE ACORNS. LASTLY, THE EFFECT OF CLIMATE ON ACORN GERMINATION IS DETERMINED. THESE ACTIVITIES PROVIDE BACKGROUND INFORMATION, MATERIALS NEEDED, DIRECTIONS, AND ADDITIONAL TOPICS FOR TEACHERS. (MA)

AVAILABILITY: NATIONAL WILDLIFE FEDERATION, 1412 16TH STREET, N.W., WASHINGTON, D.C. 20036 (ORDER NO. 79089, \$1.50)

ACCESSION NUMBER: ED103244

PUBLICATION DATE: 72

TITLE: OUTDOOR FUN FOR STUDENTS, AN ENVIRONMENTAL INVESTIGATION.

DESCRIPTOR: \*ECOLOGY; ELEMENTARY GRADES; ELEMENTARY-SECONDARY EDUCATION; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; INVESTIGATIONS; \*LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR EDUCATION; \*SCIENCE EDUCATION; SECONDARY GRADES; TEACHING GUIDES

IDENTIFIER: PLANTS; SOIL

DESCRIPTIVE NOTE: 25P.; RELATED DOCUMENTS ARE ED 103 233-253

THIS ENVIRONMENTAL UNIT IS ONE OF A SERIES DESIGNED FOR INTEGRATION WITHIN AN EXISTING CURRICULUM. THE UNIT IS SELF-CONTAINED AND REQUIRES LITTLE TEACHER PREPARATION. THE PHILOSOPHY OF THE UNITS IS BASED ON AN EXPERIENCE-ORIENTED PROCESS THAT ENCOURAGES SELF-PACED INDEPENDENT STUDENT WORK. THE PURPOSE OF THIS UNIT IS TO PROVIDE EDUCATIONAL AND ENJOYABLE OUTDOOR ACTIVITIES FOR STUDENTS OF ALL AGES. THE UNIT IS DIVIDED INTO FOUR SECTIONS, THE FIRST OF WHICH BEING CONCERNED WITH SEED DISPERSAL. IN THE SECOND SECTION, STUDENTS INVESTIGATE GOLDENROD GALLS AND THE ENVIRONMENTAL INFLUENCES ON THE WASPS THAT HATCH FROM THEM. IN THE NEXT SECTION, STUDENTS STUDY THE SUCCESSION OF PLANT DECOMPOSITION, AND FINALLY, THEY OBSERVE SOIL ORGANISMS AND STUDY THE ENVIRONMENTAL FACTORS THAT AFFECT THOSE ORGANISMS. THE ACTIVITIES CAN BE MODIFIED FOR USE WITH STUDENTS IN ALL GRADES. INFORMATION PROVIDED INCLUDES A LIST OF MATERIALS NEEDED, DIRECTIONS, AND STUDENT WORKSHEETS. (MA)

AVAILABILITY: NATIONAL WILDLIFE FEDERATION, 1412 16TH STREET, N.W., WASHINGTON, D.C. 20036 (ORDER NO. 79230, \$1.50)

ACCESSION NUMBER: ED103245

PUBLICATION DATE: 72

TITLE: PLANT PUZZLES, AN ENVIRONMENTAL INVESTIGATION.

DESCRIPTOR: \*BOTANY; ELEMENTARY EDUCATION; ELEMENTARY GRADES; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; INVESTIGATIONS; \*LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR EDUCATION; \*PLANT IDENTIFICATION; \*SCIENCE EDUCATION; TEACHING GUIDES

IDENTIFIER: \*PLANTS

DESCRIPTIVE NOTE: 21P.; RELATED DOCUMENTS ARE ED 103 233-253

THIS ENVIRONMENTAL UNIT IS ONE OF A SERIES DESIGNED FOR INTEGRATION WITHIN AN EXISTING CURRICULUM. THE UNIT IS SELF-CONTAINED AND REQUIRES MINIMAL TEACHER PREPARATION. THE PHILOSOPHY OF THE UNITS IS BASED ON AN EXPERIENCE-ORIENTED PROCESS THAT ENCOURAGES SELF-PACED INDEPENDENT STUDENT WORK. THE PURPOSE OF THIS UNIT IS TO FAMILIARIZE STUDENTS WITH THE STRUCTURAL ORGANIZATION, OR PATTERN, OF NATURAL OBJECTS. SPECIFICALLY, THE STUDENTS STUDY THE STRUCTURE OF TREE OR SHRUB BRANCHES THAT THEY HAVE COLLECTED. STUDENTS EXCHANGE BRANCHES AND KEEP THEIR DATA RECORDED IN A BRANCH BOOKLET. THE DUPLICATING MASTERS FOR THE BOOKLET ARE INCLUDED IN THE MATERIALS. AFTER THE STUDENTS HAVE STUDIED A VARIETY OF BRANCHES, THEY TRY TO RECONSTRUCT A BRANCH THAT HAS BEEN DIVIDED INTO THE PARTS OF A PLANT PUZZLE. ADDITIONAL ACTIVITIES INCLUDE COUNTING ANNUAL RINGS OF TREES, OBSERVING BUDS, AND ROOTING BRANCHES. THE ACTIVITIES ARE GEARED FOR STUDENTS IN GRADES 1-6. A LIST OF MATERIALS NEEDED, DIRECTIONS, AND BACKGROUND INFORMATION ARE INCLUDED FOR THE TEACHER. (MA)

AVAILABILITY: NATIONAL WILDLIFE FEDERATION, 1412 16TH STREET, N.W., WASHINGTON, D.C. 20036 (ORDER NO. 79150, \$1.50)

ACCESSION NUMBER: ED103249

PUBLICATION DATE: 71

TITLE: SNOW AND ICE, AN ENVIRONMENTAL INVESTIGATION.

DESCRIPTOR: \*ECOLOGY; ELEMENTARY EDUCATION; ELEMENTARY GRADES; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; INVESTIGATIONS; \*LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR EDUCATION; \*SCIENCE EDUCATION; TEACHING GUIDES

IDENTIFIER: ICE; SNOW; \*WEATHER

DESCRIPTIVE NOTE: 25P.; RELATED DOCUMENTS ARE ED 103 233-253

THIS ENVIRONMENTAL UNIT IS ONE OF A SERIES DESIGNED FOR INTEGRATION WITHIN AN EXISTING CURRICULUM. THE UNIT IS SELF-CONTAINED AND REQUIRES MINIMAL TEACHER PREPARATION. THE PHILOSOPHY BEHIND THE SERIES IS BASED ON AN EXPERIENCE-ORIENTED PROCESS THAT ENCOURAGES SELF-PACED INDEPENDENT STUDENT WORK. IN THIS UNIT, STUDENTS STUDY THE PHYSICAL PROPERTIES OF SNOW AND ICE IN RELATION TO WATER, HEAT, THE ENVIRONMENT, AND THEMSELVES. IT IS A GOAL OF THIS UNIT THAT, BY LEARNING MORE ABOUT THE BEHAVIOR OF WATER AND ITS ENVIRONMENTAL INFLUENCES, THE STUDENTS WILL BECOME INVOLVED ENOUGH TO RECOGNIZE WATER AS A VITAL SOURCE OF LIFE AND WANT TO PROTECT IT. ACTIVITIES, DESIGNED FOR THE ELEMENTARY GRADES, ARE GENERALLY DONE OUTSIDE. STUDENTS OBSERVE SNOWFLAKES, MAKE CROSS-SECTIONS OF SNOW BANKS, STUDY SNOW DENSITY AND MAKE SNOW PAINTINGS. BESIDES THESE, THERE ARE NUMEROUS OTHER SNOW ACTIVITIES THAT GUIDE STUDENTS TO THE GOAL OF THIS UNIT. EACH INCLUDES A LIST OF MATERIALS, BACKGROUND INFORMATION, AND DIRECTIONS FOR THE TEACHER. (MA)

AVAILABILITY: NATIONAL WILDLIFE FEDERATION, 1412 16TH STREET, N.W., WASHINGTON, D.C. 20036 (ORDER NO. 79052, \$1.50)

ACCESSION NUMBER: ED103250

PUBLICATION DATE: 72

TITLE: SOIL, AN ENVIRONMENTAL INVESTIGATION.

DESCRIPTOR: \*ECOLOGY; ELEMENTARY GRADES; ELEMENTARY SECONDARY EDUCATION; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; INVESTIGATIONS; \*LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR EDUCATION; \*SCIENCE EDUCATION; SECONDARY GRADES; \*TEACHING GUIDES

IDENTIFIER: \*SOIL

DESCRIPTIVE NOTE: 21P.; RELATED DOCUMENTS ARE ED 103 233-253

THIS ENVIRONMENTAL UNIT IS ONE OF A SERIES DESIGNED FOR INTEGRATION WITHIN AN EXISTING CURRICULUM. THE UNIT IS SELF-CONTAINED AND REQUIRES MINIMAL TEACHER PREPARATION. THE PHILOSOPHY OF THE SERIES IS BASED ON AN EXPERIENCE-ORIENTED PROCESS THAT ENCOURAGES SELF-PACED INDEPENDENT STUDENT WORK. THIS PARTICULAR UNIT INVESTIGATES SOIL IN RELATION TO ACIDITY, MOISTURE, MINERALS, AND ORGANISMS. STUDENTS IN GRADES 2-9 CAN DISCOVER HOW THESE FACTORS ARE INTERRELATED AND WHAT EFFECTS THEY HAVE ON THE SOIL THROUGH THE ACTIVITIES INCLUDED IN THE UNIT. TECHNIQUES FOR DETERMINING SOIL PH WITH LITMUS PAPER AND THE PRESENCE OF SOIL NITRATES WITH TEST KITS ARE INCLUDED. ALSO, STUDENTS MAKE A SAMPLE OF ORGANISMS IN THE SOIL WITH THE HELP OF A BERLESE FUNNEL. EACH ACTIVITY INCLUDES A LIST OF THE MATERIALS NEEDED AND WHERE THEY CAN BE FOUND, BACKGROUND INFORMATION, DIRECTIONS, AND QUESTIONS FOR DISCUSSION. (MA)

AVAILABILITY: NATIONAL WILDLIFE FEDERATION, 1412 16TH STREET, N.W., WASHINGTON, D.C. 20036 (ORDER NO. 79132, \$1.50)

ACCESSION NUMBER: ED103251

PUBLICATION DATE: 72

TITLE: STREAM PROFILES, AN ENVIRONMENTAL INVESTIGATION.

DESCRIPTOR: \*ECOLOGY; ELEMENTARY GRADES; \*ENVIRONMENTAL  
EDUCATION; \*FIELD STUDIES; INSTRUCTIONAL MATERIALS;  
INTERMEDIATE GRADES; INVESTIGATIONS; JUNIOR HIGH SCHOOLS;  
\*LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR EDUCATION;  
\*SCIENCE EDUCATION; SECONDARY GRADES; TEACHING GUIDES

IDENTIFIER: \*STREAMS

DESCRIPTIVE NOTE: 16P.; RELATED DOCUMENTS ARE ED 103  
233-253

THIS ENVIRONMENTAL UNIT IS ONE OF A SERIES DESIGNED FOR INTEGRATION WITHIN AN EXISTING CURRICULUM. THE UNIT IS SELF-CONTAINED AND REQUIRES MINIMAL TEACHER PREPARATION. THE PHILOSOPHY OF THE UNITS IS BASED ON AN EXPERIENCE-ORIENTED PROCESS THAT ENCOURAGES SELF-PACED INDEPENDENT STUDENT WORK. IN THIS UNIT, STUDENTS CONSTRUCT A STREAM PROFILE BASED ON INFORMATION COLLECTED AT A PORTION OF A LOCAL STREAM. TEAMS OF THREE, WORKING TEN FEET APART, ARE RESPONSIBLE FOR RECORDING DATA ON TEMPERATURE, ELEVATION, TYPE OF STREAM BOTTOM, AND PLANTS AND ANIMALS IN THE SECTION. THE DATA ARE THEN COMBINED WITH THE REST OF THE CLASS AND THE PROFILE DRAWN. STUDENTS ARE PROMPTED TO NOTE PATTERNS DESCRIBED BY THE STREAM PROFILE AND TO RELATE THAT INFORMATION TO OTHER SIMILAR STREAMS. FOR TEACHERS, THE UNIT INCLUDES DIRECTIONS FOR BUILDING THE EQUIPMENT NEEDED, WAYS OF ORGANIZING A FIELD TRIP TO THE STREAM AREA, METHODS OF COLLECTING AND RECORDING DATA, AND QUESTIONS FOR DISCUSSION. THE ACTIVITIES CAN BE USED WITH STUDENTS IN GRADES 4-9. (MA)

AVAILABILITY: NATIONAL WILDLIFE FEDERATION, 1412 16TH  
STREET, N.W., WASHINGTON, D.C. 20036 (ORDER NO. 79203,  
\$1.00)

ACCESSION NUMBER: ED103253

PUBLICATION DATE: 72

TITLE: TRANSECT STUDIES, AN ENVIRONMENTAL INVESTIGATION.

DESCRIPTOR: \*ECOLOGY; ELEMENTARY GRADES; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; INTERMEDIATE GRADES; INVESTIGATIONS; JUNIOR HIGH SCHOOLS; \*LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR EDUCATION; \*SCIENCE EDUCATION; SECONDARY GRADES; \*TEACHING GUIDES

IDENTIFIER: \*TRANSECT STUDIES

DESCRIPTIVE NOTE: 33P.; RELATED DOCUMENTS ARE ED 103 233-252

THIS ENVIRONMENTAL UNIT IS ONE OF A SERIES DESIGNED FOR INTEGRATION WITHIN AN EXISTING CURRICULUM. THE UNIT IS SELF-CONTAINED AND REQUIRES MINIMAL TEACHER PREPARATION. THE PHILOSOPHY OF THE UNITS IS BASED ON AN EXPERIENCE-ORIENTED PROCESS THAT ENCOURAGES SELF-PACED INDEPENDENT STUDENT WORK. IN THIS UNIT, STUDENTS MAKE A LINE TRANSECT AND THEN STUDY THE DIFFERENT ORGANISMS FOUND ALONG IT. PRELIMINARY ACTIVITIES ARE CONCERNED WITH FAMILIARIZING STUDENTS WITH TECHNIQUES OF MEASURING TEMPERATURE, LIGHT INTENSITY, WIND DIRECTION, AND KINDS OF ORGANISMS. NEXT, STUDENTS PREPARE THE MATERIALS TO BE USED AT THE FIELD SITE. ON THE FIELD TRIP, STUDENTS COLLECT AS MUCH DATA AS POSSIBLE ALONG THEIR TRANSECT. AT A CLASSROOM DEBRIEFING SESSION, STUDENTS DISCUSS THEIR FINDINGS AND ATTEMPT TO IDENTIFY INTERRELATIONSHIPS. THE ACTIVITIES INCLUDE A LIST OF MATERIALS NEEDED, DIRECTIONS FOR BUILDING THE EQUIPMENT, DATA COLLECTION TECHNIQUES, AND QUESTIONS FOR DISCUSSION. THE LATTER HALF OF THE UNIT IS DEVOTED TO SAMPLE GRAPHS AND DATA SHEETS THAT CAN BE DUPLICATED FOR THE STUDENTS. SUGGESTED GRADE LEVELS FOR THIS UNIT ARE 3-9. (MA)

AVAILABILITY: NATIONAL WILDLIFE FEDERATION, 1412 16TH STREET, N.W., WASHINGTON, D.C. 20036 (ORDER NO. 79196, \$1.50)

ACCESSION NUMBER: ED103255

PUBLICATION DATE: 74

TITLE: AN ENVIRONMENTAL EDUCATION PLAN FOR MONTANA.

PERSONAL AUTHOR: JACKSON, JOHN Y.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*EDUCATIONAL PROGRAMS;  
EDUCATIONAL RESEARCH; \*ENVIRONMENTAL EDUCATION; NATURAL  
RESOURCES; OUTDOOR EDUCATION; PROGRAM ATTITUDES; \*PROGRAM  
DESIGN; PROGRAM DEVELOPMENT; PROGRAM PROPOSALS; SCIENCE  
EDUCATION

IDENTIFIER: \*MONTANA; STATE PLANS

DESCRIPTIVE NOTE: 190P.; ED.D. DISSERTATION, UNIVERSITY OF  
MONTANA

THE PURPOSE OF THIS DISSERTATION WAS TO DEVELOP AN ENVIRONMENTAL EDUCATION MASTER PLAN FOR IMPLEMENTING ENVIRONMENTAL EDUCATION PROGRAMS INTO THE SCHOOLS OF MONTANA. THE PROCESS USED TO DEVELOP THE PLAN CONSISTED OF THE FOLLOWING STEPS: (1) TO EXAMINE ENVIRONMENTAL EDUCATION PLANS FROM OTHER STATES; (2) TO DETERMINE WHAT MONTANA EDUCATORS FELT SHOULD BE INCLUDED IN AN ENVIRONMENTAL EDUCATION PLAN; (3) TO CONDUCT INTERVIEWS WITH MONTANA RESIDENTS CURRENTLY INVOLVED IN ENVIRONMENTAL EDUCATION PROGRAMS; (4) TO FORMULATE TENTATIVE GOALS AND PRESENT THESE TO THE AD HOC ENVIRONMENTAL EDUCATION STEERING COMMITTEE; AND (5) TO CONDUCT TWO PUBLIC HEARINGS TO ALLOW THOSE RECEIVING THE QUESTIONNAIRES THE OPPORTUNITY TO REACT TO THE PROPOSED GOALS. SEVEN GOALS WERE PROPOSED, AMONG THEM WERE ESTABLISHMENT OF AN ENVIRONMENTAL EDUCATION COORDINATING COMMITTEE, DEVELOPING AND IMPLEMENTING PRE- AND IN-SERVICE ENVIRONMENTAL EDUCATION PROGRAMS FOR ALL TEACHERS, AND REQUIRING ALL SCHOOLS TO ESTABLISH OUTDOOR LABORATORIES. PROCEDURES FOR THE IMPLEMENTATION OF THE GOALS AND PRIORITIES FOR IMPLEMENTATION ARE CONSIDERED. (TK)

ACCESSION NUMBER: ED103256

PUBLICATION DATE: 74

TITLE: A COMPARISON OF ALTERNATIVE APPROACHES AND MATERIALS FOR TEACHING A UNIT ON POPULATIONS TO FIFTH GRADE STUDENTS IN THE URBAN DIVISION OF THE KANSAS CITY, MISSOURI SCHOOL DISTRICT.

PERSONAL AUTHOR: THOMPSON, ADELL, JR.

DESCRIPTOR: CONSERVATION EDUCATION; DOCTORAL THESES; EDUCATIONAL RESEARCH; \*ELEMENTARY EDUCATION; ELEMENTARY SCHOOL SCIENCE; \*ENVIRONMENTAL EDUCATION; GRADE 5; \*INSTRUCTION; NATURAL RESOURCES; OUTDOOR EDUCATION; \*POPULATION EDUCATION; \*SCIENCE EDUCATION; UNIT PLAN; URBAN ENVIRONMENT

IDENTIFIER: \*SCIENCE CURRICULUM IMPROVEMENT STUDY; SCIS

DESCRIPTIVE NOTE: 213P.; PH.D. DISSERTATION, UNIVERSITY OF MISSOURI-KANSAS CITY

THE PROBLEM OF THE STUDY WAS TO DETERMINE THE RELATIVE EFFECTIVENESS OF FOUR COMBINATIONS OF ALTERNATIVE INSTRUCTIONAL APPROACHES AND SETS OF CURRICULAR MATERIALS DEALING WITH THE CONCEPT "POPULATIONS" FOR TEACHING STUDENTS AT THE FIFTH-GRADE LEVEL CERTAIN PRINCIPLES OF ENVIRONMENTAL EDUCATION AS THEY RELATE TO THIS CONCEPT. A TOTAL OF 400 STUDENTS PARTICIPATED IN THE STUDY; 100 HAD SEPARATE LESSONS TAUGHT INDEPENDENTLY AND IN ADDITION TO THE REGULAR CURRICULUM (NONINTEGRATED APPROACH), 100 HAD POPULATION STUDIES INTEGRATED INTO THE EXISTING CURRICULUM, 100 UTILIZED SPECIALLY-PREPARED MATERIALS WHICH FOCUSED ON THE ENVIRONMENT OF THE LEARNER, AND 100 UTILIZED COMMERCIALY-PREPARED MATERIALS. THE CRITERION MEASURE FOR EFFECTIVENESS OF THESE MATERIALS AND APPROACHES WAS DETERMINED FROM STUDENT ACHIEVEMENT ON THE SCIENCE CURRICULUM IMPROVEMENT STUDY (SCIS) POPULATIONS EVALUATION SUPPLEMENT. IT WAS FOUND THAT THERE WAS NO SIGNIFICANT DIFFERENCE IN TYPES OF MATERIALS USED, BUT THERE WAS A SIGNIFICANT DIFFERENCE IN APPROACHES AND INTERACTION BETWEEN MATERIALS AND APPROACHES. THE INTEGRATED APPROACH APPEARED BETTER SUITED FOR SPECIALLY-PREPARED MATERIALS AND THE NONINTEGRATED APPROACH WAS BETTER SUITED FOR COMMERCIAL MATERIALS. (TK)

AVAILABILITY: ERIC/SMEAC, THE OHIO STATE UNIVERSITY, 400 LINCOLN TOWER, COLUMBUS, OHIO 43210 (ON LOAN). UNIVERSITY MICROFILMS, 300 NORTH ZEEB ROAD, ANN ARBOR, MICHIGAN 48106 (ORDER NO. 74-23,792, MF-\$5.00, XEROGRAPHY-\$11.00)

ACCESSION NUMBER: ED103278

PUBLICATION DATE: 74

TITLE: ENVIRONMENT U.S.A. A GUIDE TO AGENCIES, PEOPLE, AND RESOURCES.

PERSONAL AUTHOR: PAULSON, GLENN L., ED.; AND OTHERS

DESCRIPTOR: AGENCIES; \*CONSERVATION EDUCATION;  
\*DIRECTORIES; EDUCATIONAL RESOURCES; \*ENVIRONMENTAL  
EDUCATION; \*INDEXES (LOCATORS); NATURAL RESOURCES;  
ORGANIZATIONS (GROUPS); OUTDOOR EDUCATION; \*REFERENCE BOOKS;  
RESEARCH; RESOURCE MATERIALS; SCIENCE EDUCATION

DESCRIPTIVE NOTE: 451P.

THE INSTITUTIONALIZATION OF ENVIRONMENTAL CONCERN IS NOW WIDESPREAD IN AMERICAN SOCIETY. THIS REFERENCE WAS WRITTEN TO HELP PROFESSIONALS AND LAYMEN LOCATE IMPORTANT SOURCES OF ENVIRONMENTAL INFORMATION. AMONG THE SOURCES COVERED IN THE BOOK ARE FEDERAL AND STATE GOVERNMENT AGENCIES, PRIVATE ENVIRONMENTAL AND CONSERVATION ORGANIZATIONS, PROFESSIONAL SOCIETIES AND TRADE ASSOCIATIONS, CORPORATIONS, BOOKS, AND FILMS. SHORT BUT COMPREHENSIVE CHAPTERS ON FUND RAISING AND ENVIRONMENTAL LAW ARE INCLUDED. BY QUICKLY SCANNING THE TABLE OF CONTENTS, THE READER CAN LOCATE THE CHAPTER DEALING WITH THE TYPE OF INFORMATION IN WHICH HE IS INTERESTED. IN GENERAL, THE SUBJECT MATTER OF EACH CHAPTER IS SELF-EXPLANATORY, AND MANY OF THE CHAPTERS ARE PRECEDED BY INTRODUCTIONS INDICATING THEIR SCOPE AND ORGANIZATION. THE LISTINGS IN EACH CHAPTER ARE COMPREHENSIVE INCLUDING, WHEN APPROPRIATE, THE NAME OF THE DIRECTOR, THE ADDRESS, NAME OF THE GROUP, AGENCY, ETC., ACTIVITIES OR AIMS, PUBLICATIONS, PRICE, AND SOURCE. A FURTHER GUIDE TO THESE ENTRIES IS PROVIDED BY AN ALPHABETICAL INDEX FOUND AT THE END OF THE BOOK. (TK)

AVAILABILITY: UNIPUB, INC., P.O. BOX 433, NEW YORK, NEW YORK 10016 (ISBN 0-8352-0671-8, \$15.95)

ACCESSION NUMBER: ED103325

PUBLICATION DATE: MAR 75

TITLE: WAYS TO ENVIRONMENTAL EDUCATION, VOLUME 2.

PERSONAL AUTHOR: LAHART, DAVID, ED.; AND OTHERS

DESCRIPTOR: \*COMMUNITY INVOLVEMENT; COMMUNITY RESOURCES;  
\*ECOLOGY; ELEMENTARY SECONDARY EDUCATION; \*ENVIRONMENTAL  
EDUCATION; GAMES; HANDICAPPED STUDENTS; LEARNING ACTIVITIES;  
MAPS; \*OUTDOOR EDUCATION; RESOURCE GUIDES; \*SOCIAL HISTORY;  
TREES; UNITED STATES HISTORY

IDENTIFIER: HIGHER EDUCATION ACT TITLE I; PIONEER LIFE

DESCRIPTIVE NOTE: 160P.; FROM THE COMMUNITY LEADERS'  
TRAINING IN ENVIRONMENTAL STUDIES PROJECT (JULY 1974-JUNE  
1975); "NORTH FLORIDA WILDLIFE" UNIT REMOVED BECAUSE OF POOR  
LEGIBILITY; FOR VOLUME 1 SEE ED 100 734

ENVIRONMENTAL EDUCATION MATERIALS PRESENTED IN THIS BOOK  
ARE THE IDEAS OF COMMUNITY MEMBERS INTERESTED IN  
CONTRIBUTING TO ENVIRONMENTAL AWARENESS. MANY OF THEM ARE  
DEVELOPED AROUND THE TALLAHASSEE JUNIOR MUSEUM AND ITS  
PIONEER FARM. THEY MAY ALSO, HOWEVER, PROVIDE IDEAS THAT CAN  
BE ADAPTED TO OTHER FACILITIES OR LOCALITIES. THE BOOKLETS  
IN THIS VOLUME, DEVELOPED BY VARIOUS COMMUNITY AND EDUCATION  
GROUPS, INCLUDE: (1) MATERIALS TO GUIDE THE ACTIVITIES AND  
ATTITUDES OF STUDENTS WHO WISH TO COMMUNICATE ENVIRONMENTAL  
AWARENESS TO OTHERS, (2) OUTDOOR ACTIVITIES FOR GRADES K-3,  
(3) A UNIT ON TREES FOR INTERMEDIATE GRADE CHILDREN, (4)  
ENVIRONMENTAL LESSONS FOR THE PHYSICALLY AND MENTALLY  
HANDICAPPED, (5) "HOW-TO" INFORMATION ON HANDICRAFTS USED BY  
THE EARLY PIONEERS, (6) GUIDES AND CHECK LISTS OF WAYS IN  
WHICH CITIZENS OF EVERY AGE CAN HELP TO SAVE ENVIRONMENTAL  
QUALITY, (7) LEARNING ACTIVITIES FOR INVESTIGATING SWAMP  
LIFE, (8) MATERIALS TO AID PERSONAL DISCOVERY IN THE  
HISTORICAL SETTING OF THE PIONEER FARM, AND (9) A MAP GAME  
THAT CAN BE ADAPTED TO ANY LOCALITY. (JH)

ACCESSION NUMBER: ED104616

PUBLICATION DATE: FEB 74

TITLE: THE MEASUREMENT OF AFFECTIVE EDUCATION: A REPORT OF RECENT WORK BY OUTWARD BOUND PREPARED FOR THE CONFERENCE ON OUTDOOR PURSUITS IN HIGHER EDUCATION.

PERSONAL AUTHOR: HARMON, PAUL

DESCRIPTOR: \*AFFECTIVE OBJECTIVES; CHECK LISTS; CONFERENCE REPORTS; \*EVALUATION METHODS; \*HIGHER EDUCATION; INDIVIDUALIZED PROGRAMS; \*MEASUREMENT TECHNIQUES; \*OUTDOOR EDUCATION; QUALITY CONTROL; TEACHER PARTICIPATION; WORKSHOPS

IDENTIFIER: \*OUTWARD BOUND

DESCRIPTIVE NOTE: 40P.

TO ASSURE CONTINUING INTERNAL ORGANIZATIONAL ACCOUNTABILITY AND TO PROMOTE EXTERNAL COMMUNICATION AND IDEA ADOPTION, OUTWARD BOUND BEGAN IN 1973 ON ONGOING PROCEDURE WHEREBY ITS AFFECTIVE OBJECTIVES WERE IDENTIFIED, ANALYZED, AND EVALUATED. IN A WORKSHOP SITUATION TEACHERS INITIALLY IDENTIFIED 3 TO 6 MAJOR AFFECTIVE OBJECTIVES; THESE, THEN, WERE SUBDIVIDED INTO SUB-GOALS, WHICH CREATED A LARGE LIST. EMPLOYING SUCCESSIVE APPROXIMATION THE LIST WAS FIRST TESTED VIA ACTUAL COURSE WORK DURING THE SUMMER OF 1973. TESTING WAS ACCOMPLISHED VIA A CHECKLIST SYSTEM WHEREIN INDIVIDUAL BEHAVIOR WAS RECORDED BY A STUDENT, INSTRUCTOR, OR SENIOR INSTRUCTOR. DATA WERE THEN SUMMARIZED AND EVALUATED STATISTICALLY FOR PURPOSES OF MEASURING COURSE EFFECTIVENESS AND ESTABLISHING TRENDS. THOUGH DIFFERENT OBJECTIVES WERE AND ARE PROJECTED FOR DIFFERENT COURSES, IT IS HOPED THAT ULTIMATELY VARIOUS OBJECTIVES AND PROGRAMS WILL BE TIED TOGETHER IN A COMMON HIERARCHY. IN OTHER WORDS, OUTWARD BOUND IS EVOLVING ITS OBJECTIVES IN A SERIES OF EMPIRICALLY CHECKED STEPS. IT IS ESTIMATED THAT IT WILL TAKE TWO MORE YEARS TO DEVELOP BASIC CHECKLISTS THAT FAIRLY AND EFFECTIVELY MEASURE AFFECTIVE BEHAVIOR CHANGE IN A FIELD SETTING WHICH WILL INVOLVE BOTH FIELD TESTS WHERE THE CHECKLIST ITEMS ARE EVALUATED AND WORKSHOPS WHERE THE ITEMS ARE REVISED ON THE BASIS OF FIELD EXPERIENCE. (JC)

AVAILABILITY: OUTWARD BOUND, INC., 165 WEST PUTNAM AVENUE, GREENWICH, CONNECTICUT 06830 (\$0.50)

ACCESSION NUMBER: ED104618

PUBLICATION DATE: 74

TITLE: OUR CLASSROOM IS WILD AMERICA. TRAILSIDE EDUCATION IN ACTION -- ENCOUNTERS WITH SELF, SOCIETY, AND NATURE IN AMERICA'S FIRST ECOLOGY EXPEDITION SCHOOL.

PERSONAL AUTHOR: COHEN, MICHAEL J.

DESCRIPTOR: \*ACTIVITY LEARNING; \*ALTERNATIVE SCHOOLS; BUS TRANSPORTATION; COEDUCATION; CURRICULUM; ECOLOGY; ENVIRONMENTAL EDUCATION; \*FIELD INSTRUCTION; FUNDAMENTAL CONCEPTS; \*OUTDOOR EDUCATION; PROGRAM DESCRIPTIONS; \*SECONDARY EDUCATION; SELF EVALUATION; SMALL GROUP INSTRUCTION; SMALL SCHOOLS; STUDENT SCHOOL RELATIONSHIP; TRAVEL

IDENTIFIER: \*EXPEDITION EDUCATION; TRAILSIDE SCHOOL

DESCRIPTIVE NOTE: 210P.

THE RESULT OF A PIONEERING EFFORT IN ENVIRONMENTAL EDUCATION (EARLY 1960'S), THIS BOOK EXPLAINS AND DEFINES THE CONCEPTS AND ACTIVITIES INCORPORATED IN "EXPEDITION EDUCATION". THE TRAILSIDE SCHOOL IS DESCRIBED AS A STUDY/TRAVEL PROGRAM FOR SMALL GROUPS OF SECONDARY STUDENTS WHO, WORKING TOWARD 1 YEAR OF HIGH SCHOOL OR 2 SEMESTERS OF COLLEGE CREDIT, PARTICIPATE FOR 263 DAYS IN THE FOLLOWING FIELD STUDIES: NATURAL HISTORY, ECOLOGY, ANTHROPOLOGY, ARCHAEOLOGY, HISTORICAL RESTORATION, SOCIOLOGY, GROUP DYNAMICS, PSYCHOLOGY, HISTORY OF THE AMERICAN PEOPLE, ASTRONOMY, AND NAVIGATION, AS WELL AS COURSES IN TRADITIONAL AMERICAN MUSIC AND FOLKLORE, ENGLISH EXPOSITION, HEALTH AND PHYSICAL EDUCATION, GEOGRAPHY, HOME ECONOMICS, CITIZENSHIP, EARTH SCIENCE, GUIDANCE, AND BIOLOGY. A BLEND OF THE FOLLOWING CONCEPTS ARE CITED AS BASIC TO SUCCESSFUL EXPEDITION EDUCATION: A RETURN TO NATURAL ORIGINS, IN REALITY AS WELL AS IN IMAGINATION; DIRECT CONTACT WITH HUMAN BEINGS IN A REAL-LIFE ENVIRONMENT, ESTABLISHING A STRONG BASIS FOR PERSONAL GROWTH; A SMALL GROUP LIVING TOGETHER, PROVIDING EACH MEMBER WITH A CHANCE TO OBSERVE HIS INFLUENCE ON OTHER MEMBERS WITHIN THE GROUP; GREATER LEARNING POWER WHEN THE STUDENT ENJOYS AND INVOLVES HIMSELF IN LEARNING SITUATIONS THAT ARE "TOTALLY INVOLVING"; AND FREEDOM AS THE KEY WORD TO EDUCATION. (JC)

AVAILABILITY: TRAILSIDE ENVIRONMENTAL STUDIES, KILLINGTON, VERMONT 57051 (\$5.00)

ACCESSION NUMBER: ED104642

PUBLICATION DATE: FEB 73

TITLE: GUIDED DESIGN ENVIRONMENTAL EDUCATION. FINAL REPORT.

PERSONAL AUTHOR: WALES, CHARLES E.

DESCRIPTOR: \*CONSERVATION EDUCATION; ECOLOGY; EDUCATIONAL PROGRAMS; ELEMENTARY SECONDARY EDUCATION; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; NATURAL RESOURCES; OUTDOOR EDUCATION; \*PROGRAM DESCRIPTIONS; PROGRAM DESIGN; \*PROGRAM EVALUATION; \*SCIENCE EDUCATION

IDENTIFIER: FORESTS; PEST CONTROL

DESCRIPTIVE NOTE: 100P.

THE NEW TEACHING-LEARNING SYSTEM OF GUIDED DESIGN WAS USED TO DEVELOP PROJECT MATERIALS WHICH WOULD HELP PRIMARY AND SECONDARY STUDENTS DEVELOP BACKGROUND AND DECISION-MAKING SKILLS REQUIRED TO PARTICIPATE IN THE SOLUTION OF ENVIRONMENTAL PROBLEMS. IN CLASS, STUDENTS WORK IN SMALL GROUPS TO SOLVE MEANINGFUL OPEN-ENDED PROBLEMS WHICH ENCOURAGE THEM TO THINK LOGICALLY, GATHER INFORMATION, COMMUNICATE IDEAS, AND USE THE DECISION-MAKING STEPS. THE STUDENTS ARE GUIDED THROUGH THE SOLUTION OF EACH PROBLEM BY A SERIES OF PRINTED "INSTRUCTION AND FEEDBACK" PAGES, BY THEIR DISCUSSION WITH OTHER STUDENTS IN THEIR GROUP AND BY THE TEACHER. THIS PROGRAM, AS IT EVOLVED IN WEST VIRGINIA, IS DESCRIBED IN THIS FINAL REPORT, INCLUDING AN INTRODUCTION, METHODS, RESULTS, CONCLUSIONS AND RECOMMENDATIONS. THE BODY OF THE FINAL REPORT INCLUDES THREE APPENDICES. THE FIRST APPENDIX INCLUDES TWO INSTRUCTIONAL UNITS--ONE FOCUSES ON COMMUNITIES, THE OTHER ON FORESTS, PEST CONTROL, AND PESTICIDES. APPENDIX B INCLUDES SCHEDULES OF PRESENTATIONS DURING 1971-72 MADE BY THE GUIDED DESIGN PROJECT TEAM. APPENDIX C IS A COMPILATION OF QUESTIONS, COMMENTS, AND SUGGESTIONS ABOUT THE GUIDED DESIGN PROGRAM. (TK)

AVAILABILITY: ERIC/SMEAC, THE OHIO STATE UNIVERSITY, 400 LINCOLN TOWER, COLUMBUS, OH 43210 (ON LOAN)

ACCESSION NUMBER: ED104645

PUBLICATION DATE: 74

TITLE: THE BEGINNINGS OF A NATURE CENTER.

PERSONAL AUTHOR: CHEREM, GABRIEL J.; AND OTHERS

DESCRIPTOR: CONSERVATION EDUCATION; EDUCATIONAL PROGRAMS;  
\*ENVIRONMENTAL EDUCATION; NATURAL RESOURCES; \*NATURE  
CENTERS; OUTDOOR EDUCATION; \*PROGRAM PLANNING; \*RESOURCE  
CENTERS; \*SCIENCE EDUCATION

DESCRIPTIVE NOTE: 162P.

THIS GUIDE IS A COMPREHENSIVE INTERPRETIVE PLAN FOR THE DEVELOPMENT OF A NATURE CENTER. ALTHOUGH THE PLAN CENTERS ON A PROPOSED NATURE CENTER, THE IDEAS INCLUDED IN THE GUIDE CAN BE APPLIED TO OTHER SITUATIONS. THE GUIDE DEALS WITH ALL ASPECTS OF PLANNING AND IS DIVIDED INTO SEVEN CHAPTERS. CHAPTER 1, VISITORSHIP, LOOKS AT THE PEOPLE WHO ATTEND NATURE CENTERS. CHAPTER 2, EXTERIOR CONCEPT, INCLUDES SUCH TOPICS AS PLANS FOR EXPANSION OF THE SCHOOL HOUSE, NATURE TRAILS, PLANTING SCHEMES, EXTERIOR FLOW, AND GARDENS. THE INTERIOR CONCEPT, CHAPTER 3, LOOKS AT FLOW PATTERNS, PLACEMENT OF INTERIOR FACILITIES, VISITOR VIEW, AND OTHER INTERIOR CONCERNS. CHAPTER 4, AURA AND DISPLAYS, EXAMINES POSSIBLE DISPLAYS, SUCH AS A BEE HIVE, FOREST ALCOVE, AQUARIUM, AND OTHERS. CHAPTER 5 DEALS WITH THE JUSTIFICATION AND PLANNING OF AUDIO-VISUALS AND PUBLICATIONS FOR THE CENTER. CHAPTER 6, PROGRAM OPERATIONS, DISCUSSES SUCH NEEDS AS PHILOSOPHY AND OBJECTIVES, FUNDING, STAFFING, AND MAINTENANCE. THE INVENTORY, CHAPTER 7, PROVIDES AN INVENTORY OF THE TOPOGRAPHY, ARCHAEOLOGY, BIOTIC COMMUNITIES AND OTHERS. MOST CHAPTERS CONTAIN ILLUSTRATIONS, MAPS, AND DIAGRAMS. VISITOR CENTERS IN WISCONSIN, SAMPLE SCRIPTS FOR SLIDE SHOWS, AND A PLANT AND BIRD LIST ARE INCLUDED IN THE APPENDICES. (TK)

ACCESSION NUMBER: ED104650

PUBLICATION DATE: 74

TITLE: SKETCHES OF LOCAL ACTION PROGRAMS FOR SCHOOL ENVIRONMENTAL EDUCATION 12/73 TO 6/74.

DESCRIPTOR: \*ACTION PROGRAMS (COMMUNITY); CONSERVATION EDUCATION; EDUCATIONAL PROGRAMS; ELEMENTARY EDUCATION; \*ENVIRONMENTAL EDUCATION; \*FEDERAL PROGRAMS; GRANTS; INTERDISCIPLINARY APPROACH; NATURAL RESOURCES; OUTDOOR EDUCATION; \*PROGRAM DESCRIPTIONS; SCIENCE EDUCATION; SECONDARY EDUCATION

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; PROJECT KARE

DESCRIPTIVE NOTE: 27P.; RELATED DOCUMENTS ARE ED 063 177 AND ED 097 199

TWENTY-TWO ELEMENTARY AND SECONDARY SCHOOLS FROM THROUGHOUT THE FIVE-COUNTY SOUTHEASTERN PENNSYLVANIA REGION WERE SELECTED BY PROJECT KARE (KNOWLEDGEABLE ACTION TO RESTORE OUR ENVIRONMENT) TO RECEIVE GRANTS FOR LOCAL ACTION PROGRAMS (LAP) OF ENVIRONMENTAL EDUCATION DURING 1973-1974. THIS GUIDE REVIEWS THESE TWENTY-TWO PROGRAMS INCLUDING THE PROGRAM NAME, THE SCHOOL NAME AND ADDRESS, PROGRAM LEADERS, NUMBER OF PARTICIPATING STUDENTS AND GRADE LEVEL, GEOGRAPHIC AND DEMOGRAPHIC DESCRIPTIONS OF THE SCHOOL, AND A SYNOPSIS OF PROGRAM GOALS AND ACTIVITIES. THE PROGRAMS REVIEWED IN THE GUIDE COVER ENVIRONMENTAL TOPICS SUCH AS NATURE STUDY AREAS, AIR POLLUTION, CEMETERY STUDIES, AND LAND, AIR AND WATER STUDIES. (TK)

ACCESSION NUMBER: ED104651

PUBLICATION DATE: DEC 74

TITLE: A CURRICULUM ACTIVITIES GUIDE TO WATERSHED INVESTIGATIONS AND ENVIRONMENTAL STUDIES, VOLUME 6. REVISED.

PERSONAL AUTHOR: GAIL, PETER A.; AND OTHERS

DESCRIPTOR: \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; INVESTIGATIONS; \*LEARNING ACTIVITIES; \*NATURAL RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; SECONDARY EDUCATION; \*TEACHING GUIDES; \*WATER POLLUTION CONTROL; WATER RESOURCES

DESCRIPTIVE NOTE: 154P.; BEST COPY AVAILABLE; OCCASIONAL MARGINAL LEGIBILITY

THIS CURRICULUM ACTIVITIES GUIDE PROVIDES THE TEACHER WITH A MODEL FOR A COMPREHENSIVE PROGRAM IN WATERSHED STUDIES. WITH INCREASED CONCERN OVER WATER POLLUTION, A STUDY OF THE WATERSHED IS IMPORTANT TO COMPLETE AN UNDERSTANDING OF WATER DRAINAGE PROBLEMS. THIS GUIDE INCLUDES A RATIONALE FOR THE STUDY OF WATERSHEDS AND DEVELOPS METHODS OF IMPLEMENTATION WITHIN THE SCHOOL SYSTEM. AN OPERATIONAL MODEL FOR A WATERSHED STUDY PROGRAM ILLUSTRATES THE DATA TO BE COLLECTED, PROBLEMS TO BE IDENTIFIED, AND SPECIAL GROUPS TO BE CONTACTED FOR SUPPORT. WITH THE TEACHING ACTIVITIES IN THE GUIDE, BACKGROUND INFORMATION IS INCLUDED. A SECTION IN THE GUIDE EXPLAINS THE SKILLS NEEDED FOR THE WATERSHED STUDY AND APPENDICES AT THE END INCLUDE A BIBLIOGRAPHY AND SAMPLE ORGANIZATIONAL INFORMATION. (MA)

AVAILABILITY: INSTITUTE FOR ENVIRONMENTAL EDUCATION, 8911 EUCLID AVENUE, CLEVELAND, OH 44106 (\$6.75)

ACCESSION NUMBER: ED105672

PUBLICATION DATE: NOV 73

TITLE: OUTDOOR EDUCATION FOR THE HANDICAPPED.

PERSONAL AUTHOR: DYKSTRA, RALPH R.

DESCRIPTOR: CLASS ACTIVITIES; \*COMPUTER ASSISTED INSTRUCTION; EXCEPTIONAL CHILD EDUCATION; GAMES; \*HANDICAPPED CHILDREN; INDIVIDUAL ACTIVITIES; \*INSTITUTES (TRAINING PROGRAMS); INSTRUCTIONAL MATERIALS; \*OUTDOOR EDUCATION; \*TEACHING METHODS

DESCRIPTIVE NOTE: 157P.; PROCEEDINGS FROM SPECIAL STUDY INSTITUTE (FRANKLINVILLE, NEW YORK, NOVEMBER 16, 1973)

PRESENTED ARE PROCEEDINGS AND MATERIALS FROM A SPECIAL STUDY INSTITUTE (1973) DESIGNED TO PROVIDE CLASSROOM TEACHERS OF TRAINABLE AND EDUCABLE MENTALLY RETARDED, PHYSICALLY HANDICAPPED, DEAF, BLIND AND LEARNING-DISABLED CHILDREN WITH INFORMATION ON OUTDOOR EDUCATION FOR HANDICAPPED CHILDREN. EXPLAINED ARE PROGRAM OBJECTIVES (SUCH AS DEMONSTRATING HOW THE OUTDOORS CAN BE USED TO EXPAND EXISTING CURRICULUM AREAS AND FAMILIARIZING PARTICIPANTS WITH A WIDE RANGE OF INSTRUCTIONAL MATERIALS AVAILABLE FOR USE IN OUTDOOR EDUCATION PROGRAMS. INFORMATION FROM WORKSHOP SESSIONS INCLUDES SUGGESTED ACTIVITIES IN THE AREAS OF HUMAN RELATIONS IN THE OUT-OF-DOORS, ARTS AND CRAFTS, SCIENCE AND NATURE, SOCIAL STUDIES, AND OUTDOOR (SCHOOL GROUND) GAMES. A MAJOR PORTION OF THE DOCUMENT CONSISTS OF A SAMPLE COMPUTER-BASED RESOURCE GUIDE WHICH PROVIDES LISTS OF ACTIVITIES, MATERIALS, AND MEASURING DEVICES RELATED TO SPECIFIC OBJECTIVES (SUCH AS BUILDING A FIRE) FOR BOTH GROUPS AND INDIVIDUAL STUDENTS. REPORTED ARE RESULTS OF PARTICIPANT EVALUATIONS OF EACH WORKSHOP, AND APPENDED ARE FORMS, MENUS, AND OTHER INFORMATION ON THE INSTITUTE. (LS)

ACCESSION NUMBER: ED106010

PUBLICATION DATE: 6 OCT 74

TITLE: PROCEEDINGS OF THE CANADIAN CAMPING ASSOCIATION  
OUTDOOR EDUCATION CONFERENCE (LA CALECHE, STE-AGATHE, QUE,  
OCTOBER 3-6, 1974.

DESCRIPTOR: \*CAMPING; CONFERENCE REPORTS; COSTS; CRITERIA;  
ENVIRONMENTAL EDUCATION; \*GUIDELINES; LEADERSHIP TRAINING;  
LEARNING ACTIVITIES; \*NATURE NURTURE CONTROVERSY;  
OBJECTIVES; \*OUTDOOR EDUCATION; PROGRAM ADMINISTRATION;  
\*PROGRAM DEVELOPMENT; RESOURCES; SITE SELECTION; SPEECHES;  
STAFF ROLE; WORKSHOPS

IDENTIFIER: CANADA

DESCRIPTIVE NOTE: 52P.

THE PROCEEDINGS OF THE NATIONAL OUTDOOR EDUCATION CONFERENCE INCLUDE 3 ADDRESSES ON OUTDOOR EDUCATION AND CAMPING AND 3 WORKSHOP REPORTS, REPRESENTING THE INPUT OF SOME 60 DELEGATES FROM EVERY PART OF CANADA. EMPHASIZING LIVING AND LEARNING, QUALITY OF LIFE, AND UTILIZATION OF THE ENVIRONMENT, THE SPEECHES ARE AIMED AT DEFINING AND CLARIFYING THE ROLE OF CAMPING IN OUTDOOR EDUCATION. THE WORKSHOP REPORT ON "CONTEMPORARY ISSUES IN OUTDOOR EDUCATION" CONSIDERS THE FOLLOWING TOPICS: NEEDS AND ISSUES; A DESCRIPTIVE STATEMENT; PROGRAM CONTENT; CRITERIA FOR SELECTING ACTIVITIES; LEADERSHIP DEVELOPMENT, MODELS, AND PRINCIPLES; PROBLEMS IN IMPLEMENTATION; OUTDOOR EDUCATION COMMITTEES; ECONOMIC ISSUES, LEASE, RENTAL, AND PURCHASE OF SITES; STRATEGIES FOR MAKING DELIBERATIONS KNOWN; AND THE RELATIONSHIP OF CAMPS. THE WORKSHOP REPORT ON "NATURE AWARENESS IN CAMPING'S ROLE" DEALS WITH: NATURE AWARENESS DEFINITIONS; LEARNING CRITERIA; COMPONENTS FOR LEARNING; STAFF TRAINING AND EDUCATION; ROLE OF THE CAMP DIRECTOR AND THE CAMP NATURALIST; ENVIRONMENTAL MAINTENANCE STANDARDS; AND IMPLEMENTATION OF NATURE AWARENESS PROGRAMS. THE WORKSHOP REPORT ON "OUTDOOR EDUCATION GUIDELINES FOR CAMP" DETAILS MAJOR OBJECTIVES; CAMP RESOURCES FOR OUTDOOR EDUCATION; STAFFING PATTERNS; AND ADMINISTRATION AND IMPLEMENTATION PROCEDURES. (JC)

ACCESSION NUMBER: ED106054

PUBLICATION DATE: 72

TITLE: SUGGESTED ACTIVITIES USING THE SCHOOL AND ITS SURROUNDINGS AS A RESOURCE FOR ENVIRONMENTAL EDUCATION.

DESCRIPTOR: CONSERVATION EDUCATION; \*CURRICULUM GUIDES; ELEMENTARY SECONDARY EDUCATION; ENVIRONMENT; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; METROPOLITAN AREAS; NATURAL RESOURCES; \*OUTDOOR EDUCATION; \*SCHOOL LOCATION; TEACHING GUIDES; \*URBAN ENVIRONMENT

DESCRIPTIVE NOTE: 12P.

THIS COLLECTION OF ENVIRONMENTAL EDUCATION ACTIVITIES FOCUSES ON THE SCHOOL AND ITS SURROUNDINGS. THE ACTIVITIES REINFORCE THE CONCEPT THAT THE IMMEDIATE SCHOOL ENVIRONMENT CONTAINS ELEMENTS THAT ARE COMMON TO THE STRUCTURE OF THE WHOLE MAN-MADE ENVIRONMENT. THE ACTIVITIES PROVIDE IDEAS FOR USING THE SCHOOL BUILDING, SCHOOL GROUNDS, AND SURROUNDING COMMUNITY FOR EXPLORING, UNDERSTANDING, AND COMMUNICATING THE VARIOUS COMPONENTS OF THE MAN-MADE ENVIRONMENT. THE GUIDE CONTAINS EIGHT TOPICS, SUCH AS: GETTING TO SCHOOL: PEOPLE/MATERIALS AND PRODUCTS; LAND AND ROOM USE: SCHOOL BUILDING/SCHOOLYARD/SURROUNDING COMMUNITY; LIFE SUPPORT SYSTEMS; AND PARALLELS BETWEEN THE NATURAL AND MAN-MADE ENVIRONMENT. UNDER EACH TOPIC IS LISTED A NUMBER OF CORRESPONDING ACTIVITIES. THE ACTIVITIES REPRESENT AN INTERDISCIPLINARY APPROACH TO ENVIRONMENTAL EDUCATION AND INCLUDE PROBLEM SOLVING, DISCUSSION, PHOTOGRAPHY, INQUIRY, AND MEASUREMENT. (TK)

ACCESSION NUMBER: ED106067

PUBLICATION DATE: 75

TITLE: A DISCOVERY WALK IN NATURAL SCIENCE.

PERSONAL AUTHOR: SCHENBERG, SAMUEL; AND OTHERS

DESCRIPTOR: CONSERVATION EDUCATION; \*ELEMENTARY EDUCATION;  
\*ENVIRONMENTAL EDUCATION; \*FILMSTRIPS; \*LEARNING ACTIVITIES;  
NATURAL RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION;  
SCRIPTS; \*URBAN EDUCATION

IDENTIFIER: ENVIRONMENTAL EDUCATION ACT

DESCRIPTIVE NOTE: 18P.; PRODUCED WITH COOPERATION OF THE  
NEW YORK CITY BOARD OF EDUCATION

THIS BOOKLET IS THE CORRELATED SCRIPT FOR A 48-FRAME COLOR FILMSTRIP DESIGNED TO EXPAND THE ENVIRONMENTAL EXPERIENCES OF URBAN SCHOOL CHILDREN AND THEIR TEACHERS. INCLUDED THROUGHOUT THE SCRIPT ARE RELATED PROJECTS THAT ENCOURAGE DISCOVERY ACTIVITIES INSIDE AND OUT OF THE CLASSROOM. BASED UPON THE KNOWLEDGE THAT OVER 75 PERCENT OF ALL UNITED STATES SCHOOL CHILDREN LIVE IN AN URBAN ENVIRONMENT, THE DEVELOPERS OF THIS FILMSTRIP FEEL THAT IT IS VERY IMPORTANT THAT THESE CHILDREN LEARN ABOUT THEIR NATURAL SURROUNDINGS. AS FUTURE DECISION MAKERS, THEY NEED TO KNOW MORE ABOUT THE ECOLOGICAL RELATIONSHIPS THAT EXIST IN NATURE. SOME OF THE MORE COMMON RELATIONSHIPS ARE ILLUSTRATED AND EXPLAINED IN THE FILMSTRIP. (MA)

AVAILABILITY: AMERICAN MUSEUM OF NATURAL HISTORY, CENTRAL PARK WEST AT 79TH STREET, NEW YORK, NEW YORK 10024

ACCESSION NUMBER: ED106074

PUBLICATION DATE: 73

TITLE: WILDLIFE HABITAT IMPROVEMENT GUIDE FOR MINNESOTA YOUTH.

PERSONAL AUTHOR: HALSEY, CLIFTON

DESCRIPTOR: \*CONSERVATION EDUCATION; ECCLOGY; ELEMENTARY SECONDARY EDUCATION; ENVIRONMENT; \*ENVIRONMENTAL EDUCATION; \*NATURAL RESOURCES; \*CUTDOOR EDUCATION; SCIENCE EDUCATION; \*WILDLIFE MANAGEMENT; ZOOLOGY

DESCRIPTIVE NOTE: 37P.; PHOTOGRAPHS RELATED TO THE TEXT MAY NOT REPRODUCE CLEARLY

THIS PUBLICATION OUTLINES PROJECTS TO INCREASE WILDLIFE, PRIMARILY FOWL AND DEER, AND TO HELP RURAL YOUTH BETTER UNDERSTAND WILDLIFE REQUIREMENTS. THE PUBLICATION OUTLINES SIX BASIC STEPS THAT ARE INVOLVED IN INITIATING A WILDLIFE PROJECT. THESE ARE: (1) DETERMINE THE TYPES OF WILD ANIMALS FOR WHICH THE LAND IS BEST SUITED; (2) STUDY THE LIFE REQUIREMENTS OF SPECIES SELECTED FOR MANAGEMENT; (3) PREPARE A HABITAT MAP; (4) MAKE A GENERAL INVENTORY OF THAT AREA'S GAME SPECIES; (5) DETERMINE WHICH OF THE SELECTED SPECIES' LIFE REQUIREMENTS ARE LACKING; (6) DESIGN AND IMPLEMENT PROJECTS THAT WILL IMPROVE THE WILDLIFE HABITAT AND INCREASE THE NUMBER OF WILDLIFE. THE PUBLICATION DEVOTES A SECTION TO EACH STEP: THE SECTIONS INCLUDE PHOTOGRAPHS, MAPS, DIAGRAMS, TABLES, BACKGROUND INFORMATION, AND SUGGESTED RESOURCE MATERIALS. SUCH TOPICS AS WINTER COVER, WINTER FOOD, NESTING COVER, WETLAND DEVELOPMENT PROJECTS, AND AREA TYPES ARE INCLUDED. THE FINAL SECTION PROVIDES A CLOSER LOOK AT SUCH PROJECTS AS PHEASANT PROJECTS, SHARPTAILED GROUSE-PRAIRIE CHICKEN PROJECTS, WATER FOWL PROJECTS, AND DEER AND RUFFED GROUSE PROJECTS. A RECOMMENDED READING LIST IS INCLUDED.  
(TK)

ACCESSION NUMBER: ED106083

PUBLICATION DATE: 70

TITLE: CONSERVATION PLAN, SEAMAN OUTDOOR LABORATORY FOR ENVIRONMENTAL EDUCATION.

DESCRIPTOR: BIOLOGY; CONSERVATION EDUCATION; EDUCATIONAL FACILITIES; EDUCATIONAL PROGRAMS; ELEMENTARY SECONDARY EDUCATION; \*ENVIRONMENTAL EDUCATION; GEOLOGY; \*NATURAL RESOURCES; \*NATURE CENTERS; OUTDOOR EDUCATION; \*PROGRAM PLANNING; RESOURCE CENTERS; \*SCIENCE EDUCATION; TEACHING GUIDES

IDENTIFIER: ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; PLANTS; SOILS

DESCRIPTIVE NOTE: 171P.; PICTURES WILL REPRODUCE POORLY

THIS GUIDE FOCUSES ON THE CONSERVATION PLAN FOR AN OUTDOOR LABORATORY. ALTHOUGH THE PLAN FOCUSES SPECIFICALLY ON SEAMAN OUTDOOR EDUCATION LABORATORY, THE CONCEPTS COULD BE APPLIED TO ANY NATURAL AREA INCLUDING PARKS, FARMS, AND SCHOOL GROUNDS. ALONG WITH AN INTRODUCTION AND JUSTIFICATION, THE GUIDE INCLUDES THE CONSERVATION PLAN THAT SERVES AS THE BLUEPRINT FOR THE USE AND TREATMENT OF THE LAND TO BE USED; IT WAS DEVELOPED ON THE BASIS OF INTENDED LAND USE. THE CONSERVATION PLAN INCLUDES THE PLAN MAP AND A GENERAL OVERVIEW OF THE AREA. A NATURAL RESOURCES INVENTORY THAT LOOKS AT THE SOILS, THE GEOLOGY, THE GRASSLAND, WOODLAND, AND THE BIOLOGY OF THE AREA IS PRESENTED. ALSO INCLUDED ARE ENVIRONMENTAL PROJECTS SUCH AS FIELD TRIPS, NATURE TRAILS, ACTIVITIES, IDEAS, WORKSHEETS, AND A TEACHER'S PLANNING GUIDE, AND A BIBLIOGRAPHY. (TK)

ACCESSION NUMBER: ED106087

PUBLICATION DATE: 74

TITLE: VALUING THE ENVIRONMENT, ELEMENTARY.

DESCRIPTOR: CONSERVATION EDUCATION; \*ELEMENTARY EDUCATION;  
\*ENVIRONMENTAL EDUCATION; \*INSTRUCTIONAL MATERIALS; LEARNING  
ACTIVITIES; \*NATURAL RESOURCES; OUTDOOR EDUCATION; SCIENCE  
ACTIVITIES; SCIENCE EDUCATION; URBAN ENVIRONMENT; \*VALUES

IDENTIFIER: VALUE CLARIFICATION STRATEGIES

DESCRIPTIVE NOTE: 67P.; A LARGE PORTION OF THE TEXT IS  
PRINTED ON COLORED PAPER AND MAY NOT REPRODUCE CLEARLY .

THIS GUIDE WAS DEVELOPED FOR USE IN GRADES K-6 AS AN  
ENRICHMENT PROGRAM BASED ON CLARIFYING VALUES. THE PROGRAM,  
DESIGNED BY TEACHERS, AIMS TO DEVELOP IN THE STUDENT A  
GREATER AWARENESS AND UNDERSTANDING OF THE COMMUNITY,  
THEMSELVES, AND THE EARTH. THE PROGRAM INCLUDES  
ENVIRONMENTAL ENCOUNTERS AND A CHART OF TOPICAL THEMES AND  
CONCEPTUAL THEMES. TOPICAL THEMES LEAD TEACHERS AND STUDENTS  
THROUGH MAIN AREAS OF AWARENESS: PLANTS AND ANIMALS, WATER,  
AIR, ENERGY, NATURAL RESOURCES, LAND USE AND AESTHETICS, AND  
POLLUTION. THE CONCEPTUAL SCHEMES UNDER EACH AREA OF  
AWARENESS INCREASE IN COMPLEXITY ACCORDING TO THE  
DEVELOPMENT LEVEL OF THE STUDENTS. THE ACTIVITIES IN THE  
ENCOUNTERS ARE ACTION-ORIENTED, STUDENT-CENTERED ACTIVITIES  
WHICH PROVIDE "HANDS-ON" LEARNING EXPERIENCES. EACH  
ENCOUNTER PROVIDES BACKGROUND INFORMATION, BEHAVIORAL  
OBJECTIVES, ACTIVITIES, A RESOURCE REFERENCE LISTING, AND  
VALUE CLARIFICATION STRATEGIES. VALUE CLARIFICATION  
STRATEGIES ARE INCLUDED BECAUSE THE DEVELOPMENT OF ATTITUDES  
AND A LIFESTYLE COMPATIBLE TO THE NATURAL ENVIRONMENT IS  
RELATED TO ENVIRONMENTAL AWARENESS, UNDERSTANDING,  
DECISION-MAKING, AND ACTION. INSTRUCTIONS FOR USE OF THE  
VALUE CLARIFICATION STRATEGIES CONTAINED IN THE PROGRAM ARE  
INCLUDED. (TK)

ACCESSION NUMBER: ED106088

PUBLICATION DATE: SEP 74

TITLE: MARINE ECOLOGY RESEARCH RESOURCE UNITS GRADES 7-9.  
DRAFT.

DESCRIPTOR: EARTH SCIENCE; \*ECOLOGY; ENVIRONMENTAL  
EDUCATION; \*LEARNING ACTIVITIES; \*OCEANOLOGY; OUTDOOR  
EDUCATION; \*SCIENCE EDUCATION; \*SECONDARY EDUCATION; TEACHER  
DEVELOPED MATERIALS

IDENTIFIER: CALIFORNIA; ELEMENTARY SECONDARY EDUCATION ACT  
TITLE III; ESEA TITLE III

DESCRIPTIVE NOTE: 178P.

PROJECT MARINE ECOLOGY RESEARCH (MER) IS AN ECOLOGICAL UNIT  
DESIGNED TO INVOLVE SECONDARY STUDENTS IN THE STUDY OF THE  
MARINE BIOME. THE TEACHERS ARE ALSO INVOLVED WITH MER  
THROUGH INSERVICE PARTICIPATION AND MATERIALS PREPARATION.  
THE UNIT IS DESIGNED TO BE INCORPORATED WITHIN THE EXISTING  
SCIENCE CURRICULUM. SPECIFICALLY, THE ACTIVITIES CONCERN THE  
STUDY OF THE SAN FRANCISCO BAY AREA—ITS GEOLOGY, GEOGRAPHY,  
CLIMATE AND WEATHER, WAVE AND TIDE ACTION, AND CURRENTS.  
EACH OF THE FOUR ACTIVITY SECTIONS ARE ARRANGED SIMILARLY.  
THE INTRODUCTION INCLUDES BACKGROUND INFORMATION FOR THE  
TEACHER AND A LIST OF EDUCATIONAL OBJECTIVES. THE APPENDIX  
CONTAINS THE ACTIVITIES AS WELL AS CHARTS, MAPS, STATISTICS,  
AND OTHER PERTINENT INFORMATION. EACH SECTION ENDS WITH A  
BIBLIOGRAPHY. (MA)

ACCESSION NUMBER: ED106089

PUBLICATION DATE: SEP 74

TITLE: GUIDE TO MARINE ECOLOGY RESEARCH . . . A CURRICULUM FOR SECONDARY STUDENTS.

PERSONAL AUTHOR: CASTELLANI, MARYLYNN L., ED.

DESCRIPTOR: EARTH SCIENCE; \*ECOLOGY; ENVIRONMENTAL EDUCATION; LABORATORY MANUALS; \*LEARNING ACTIVITIES; \*OCEANOLOGY; OUTDOOR EDUCATION; \*SCIENCE EDUCATION; \*SECONDARY EDUCATION

IDENTIFIER: \*CALIFORNIA; ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

DESCRIPTIVE NOTE: 150P.; CONTAINS NUMEROUS MAPS AND DRAWINGS UNSUITABLE FOR REPRODUCTION

PROJECT MARINE ECOLOGY RESEARCH (MER) IS AN ECOLOGICAL CURRICULUM DESIGNED TO INVOLVE SECONDARY STUDENTS IN THE STUDY OF THE MARINE BIOME. THE BACKGROUND MATERIAL AND LEARNING ACTIVITIES CONCERN THE STUDY OF THE SAN FRANCISCO BAY AREA. THE GUIDE IS DIVIDED INTO TWO MAJOR PARTS. IN THE FIRST PART, A HISTORY OF THE BAY AREA IS GIVEN. IT INCLUDES THE NATURE OF THE REGION, MAJOR CHANGES, AND IMPORTANT AQUATIC SPECIES. THE BAY-DELTA-ESTUARINE ECOSYSTEM IS DISCUSSED IN DETAIL. PARTICULAR ATTENTION IS GIVEN TO THE LIFE HISTORIES OF THE KING SALMON AND THE STRIPED BASS. THE RELATIONSHIP BETWEEN ORGANISMS AND WATER QUALITY IS ALSO TREATED. THIS SECTION ENDS WITH A DISCUSSION OF THE FUTURE OF THIS AREA. PART TWO CONTAINS THE LABORATORY INVESTIGATIONS. THESE ACTIVITIES COMPLEMENT THE EARLIER DISCUSSIONS AND DIRECTLY CONCERN AN ANALYSIS OF THE BAY AREA. TOPICS INCLUDE THE STUDY OF A PLANKTON POPULATION, THE SAN FRANCISCO WATERSHED, AND BIOLOGICAL SAMPLING OF A MUD FLAT. (MA)

AVAILABILITY: DIRECTOR, PROJECT MER, CONTRA COSTA COUNTY SUPERINTENDENT OF SCHOOLS OFFICE, 75 SANTA BARBARA ROAD, PLEASANT HILL, CALIFORNIA 94523; ERIC/SMEAC, THE OHIO STATE UNIVERSITY, 400 LINCOLN TOWER, COLUMBUS, OHIO 43210 (ON LOAN)

ACCESSION NUMBER: ED10610X

PUBLICATION DATE: 73

TITLE: NATURAL RESOURCES AND CAREER AWARENESS. A TEACHER'S GUIDE FOR GRADES K-6.

PERSONAL AUTHOR: WARD, GEORGE C.

DESCRIPTOR: \*CAREER CHOICE; CAREER EDUCATION; CONSERVATION EDUCATION; \*ELEMENTARY EDUCATION; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; KINDERGARTEN; LEARNING ACTIVITIES; \*NATURAL RESOURCES; \*OCCUPATIONAL GUIDANCE; OUTDOOR EDUCATION; PRESCHOOL EDUCATION; SCIENCE EDUCATION; \*TEACHING GUIDES; VOCATIONAL EDUCATION.

DESCRIPTIVE NOTE: 115P.

CAREER EDUCATION IS A COMPREHENSIVE, SYSTEMATIC, AND COHESIVE PLAN OF INSTRUCTION THAT PROVIDES EACH STUDENT THE OPPORTUNITY TO PLAN AND PREPARE FOR A MEANINGFUL AND SATISFYING ROLE AS A WORKING MEMBER OF SOCIETY. THIS GUIDE WAS DESIGNED TO OFFER TEACHERS A SEQUENCED PROGRAM OF SUGGESTED TOPICS AND LEARNING ACTIVITIES IN THE NATURAL RESOURCES, AND TO OFFER INFORMATION REGARDING CAREERS IN NATURAL RESOURCES. THE GUIDE IS DIVIDED INTO THREE SECTIONS THAT ARE BASED ON A SEQUENTIAL PROGRESSION FROM KINDERGARTEN THROUGH GRADE SIX. SECTION A (K-1-2) EXPLORES THE WORLD OF THE CHILD AND DIVIDED THIS WORLD INTO IDENTIFIABLE STUDY GROUPS. SECTION B (GRADES 3-4) DEALS WITH THE NEEDS OF LIVING THINGS AND RELATES THEM TO THE USE OF NATURAL RESOURCES. SECTION C (GRADES 5-6) OFFERS MATERIAL THAT WILL HELP CHILDREN BECOME AWARE OF SPECIFIC INFORMATION ABOUT INTERRELATIONSHIPS THAT EXIST AMONG NATURAL RESOURCES. CAREER INFORMATION IS INCLUDED IN EACH SECTION. THE SECTIONS ARE SUBDIVIDED INTO A NUMBER OF TOPICS. EACH TOPIC INCLUDES A GOAL STATEMENT, ACTIVITIES, WORKSHEETS, TEACHER'S NOTES AND EVALUATION STRATEGIES. REFERENCE MATERIALS ARE LISTED IN THE APPENDICES. (AUTHOR/TK)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (NO PRICE QUOTED)

ACCESSION NUMBER: ED106207

PUBLICATION DATE: '75

TITLE: THE URBAN-ENVIRONMENT. A TEACHER'S GUIDE, GRADES K-3.

PERSONAL AUTHOR: BUSCH, PHYLLIS S.

DESCRIPTOR: CONSERVATION (ENVIRONMENT); CURRICULUM GUIDES;  
\*ECOLOGY; ELEMENTARY EDUCATION; \*ENVIRONMENTAL EDUCATION;  
LEARNING ACTIVITIES; OUTDOOR EDUCATION; SOCIAL STUDIES;  
TEACHING GUIDES; \*URBAN EDUCATION; \*URBAN ENVIRONMENT

DESCRIPTIVE NOTE: 217P.

SIXTY-THREE LEARNING ACTIVITIES COMPRISE THIS CURRICULUM GUIDE TO CONSERVATION EDUCATION DESIGNED FOR ELEMENTARY STUDENTS. THE ACTIVITIES ENABLE THE TEACHER TO RELATE THE URBAN CHILD'S IMMEDIATE ENVIRONMENT TO THE ECOLOGICAL PROBLEMS WHICH CONFRONT OUR WORLD. FOUR CONCEPTUAL SCHEMES ARE USED FOR EACH OF THE FOUR GRADES, K-3: LIVING THINGS (PLANTS, ANIMALS, AND MAN) (1) ARE PRODUCTS OF THEIR HEREDITY AND ENVIRONMENT; (2) LIVING THINGS ARE INTERDEPENDENT WITH ONE ANOTHER AND WITH THEIR NONLIVING ENVIRONMENT; (3) LIVING, NATURAL NONLIVING THINGS, AND MAN-MADE NON LIVING THINGS ARE CONSTANTLY CHANGING; AND (4) HUMAN BEHAVIOR IS AFFECTED BY WHERE AND HOW PEOPLE LIVE, WORK, PLAY, AND ORGANIZE THEIR ACTIVITIES. AMONG THE LESSONS ARE TOPICS ON ANIMALS, SOIL, DRESS, SIGNS AND SIGNALS IN THE CITY, PREDICTING CHANGES IN THE CITY, COUNTRY LIFE AND CITY LIFE, CITY NOISE, AND SIMILARITIES AND DIFFERENCES AMONG PEOPLE. EACH LESSON IS DIVIDED INTO CONCEPT, PURPOSE, TEACHING PROCEDURES, EXTENDING THE LESSON INTO THE HOME, BEHAVIORAL EVIDENCE OF ACHIEVEMENT, MATERIALS NEEDED, AND BACKGROUND INFORMATION. A BIBLIOGRAPHY OF RELATED MATERIALS IS INCLUDED AT THE END OF EACH LESSON. A COMPLETE BIBLIOGRAPHY AND A LISTING OF SOURCES OF FILMS AND MATERIALS CONCLUDE THE BOOK. (AUTHOR/JR)

AVAILABILITY: J.G. FERGUSON PUBLISHING COMPANY, 100 PARK AVENUE, NEW YORK, NEW YORK 10017 (\$4.85)

ACCESSION NUMBER: ED106213

PUBLICATION DATE: MAY 75

TITLE: WAYS TO ENVIRONMENTAL EDUCATION, VOLUME III.

PERSONAL AUTHOR: ALLEN, RODNEY F., ED.; AND OTHERS

DESCRIPTOR: ANIMAL FACILITIES; COMMUNITY INVOLVEMENT;  
\*COMMUNITY RESOURCES; CREATIVITY; \*ECOLOGY; ELEMENTARY  
SECONDARY EDUCATION; ENERGY; \*ENVIRONMENTAL EDUCATION;  
LEARNING ACTIVITIES; \*MUSEUMS; \*OUTDOOR EDUCATION; READING  
IMPROVEMENT; SHORT COURSES; SOCIAL SCIENCES

DESCRIPTIVE NOTE: 150P.; FOR RELATED DOCUMENTS, SEE ED 100  
734 AND ED 103 325 ; PAGES 8 OF DEVELOPING READING COMPETENCY  
SECTION AND 15 THROUGH 18 OF ENERGY AND ENVIRONMENT SECTION  
OF THE ORIGINAL DOCUMENT ARE COPYRIGHTED AND THEREFORE NOT  
AVAILABLE

TEN ENVIRONMENTAL EDUCATION BOOKLETS PRESENTED IN THIS  
DOCUMENT ARE THE THIRD VOLUME OF THE ENVIRONMENTAL SERIES  
DEVELOPED BY COMMUNITY GROUPS AROUND THE TALLAHASSEE JUNIOR  
MUSEUM AND ITS PIONEER FARM. THE FIRST THREE BOOKLETS  
PRESENT AN OVERVIEW OF THE MUSEUM AND OF THE VARIOUS  
EDUCATION PROGRAMS AND ACTIVITIES OFFERED FOR STUDENTS AT  
THE MUSEUM AND FARM. ANIMALS ARE DISCUSSED IN DETAIL IN THE  
NEXT UNIT, DEVELOPED BY THE FLORIDA AUDUBON CHAPTER. ANOTHER  
UNIT FOSTERS CREATIVITY IN ENVIRONMENTAL EDUCATION WHILE  
ALSO DEVELOPING HUMAN BEHAVIOR. OTHER UNITS PRESENT HELPFUL  
HINTS FOR GROWING PLANTS AND HERBS, AND INCLUDE INFORMATION  
ON ENVIRONMENTAL EXCURSIONS; DEVELOPING READING COMPETENCY  
IN ENVIRONMENTAL EDUCATION; ENVIRONMENTAL AND BEHAVIORAL  
FEELINGS; AND ENERGY AND ENVIRONMENT LEARNING ACTIVITIES FOR  
CAMP AND HOME. THESE MATERIALS AUGMENT THOSE FOUND IN  
VOLUMES I AND II (ED 100 734 AND SO 008 187). (JR)

ACCESSION NUMBER: ED106295

PUBLICATION DATE: 73

TITLE: THE FIFTEENTH INTERNATIONAL CONGRESS OF THE INTERNATIONAL COUNCIL ON HEALTH, PHYSICAL EDUCATION, AND RECREATION (LONDON, ENGLAND, AUGUST 9-11, 1972).

DESCRIPTOR: ATHLETICS; CHILD DEVELOPMENT; CONFERENCES;  
\*HEALTH; OUTDOOR EDUCATION; \*PHYSICAL EDUCATION;  
\*RECREATION; \*STUDENTS; STUDENT TEACHER RELATIONSHIP;  
TEACHER EDUCATION; \*TEACHERS

DESCRIPTIVE NOTE: 102P.; NOT AVAILABLE IN HARD COPY OR MICROFICHE DUE TO LEGIBILITY OF ORIGINAL DOCUMENT.

THIS COLLECTION OF CONFERENCE PAPERS IS BASED ON TALKS GIVEN AT THE CONGRESS OF THE INTERNATIONAL COUNCIL ON HEALTH, PHYSICAL EDUCATION, AND RECREATION. TOPICS DEALT WITH ARE THE FOLLOWING: (A) SOCIAL PERSPECTIVES IN CHILD DEVELOPMENT; (B) RELATIONSHIPS BETWEEN CHILDREN AND TEACHERS IN HEALTH, PHYSICAL EDUCATION, AND RECREATION; (C) RELATIONSHIPS BETWEEN INTELLECTUAL AND NONINTELLECTUAL PERFORMANCE; (D) MORPHOLOGIC DIFFERENCES BETWEEN BOYS AND GIRLS AND THEIR IMPORTANCE FOR PHYSICAL EDUCATION; (E) ANALYSIS OF TEACHING AND ITS INFLUENCE IN PHYSICAL EDUCATION TEACHER PREPARATION; (F) PROBLEMS AND POSSIBLE SOLUTIONS REGARDING COMPETITIVE SPORTS IN SCHOOL PHYSICAL EDUCATION PROGRAMS; (G) CURRICULUM AND PROFESSIONAL PREPARATION FOR PHYSICAL EDUCATION IN INDIA; (H) FOUR SWISS REFERENDA ON THE OLYMPIC GAMES; (I) CONSUMER PROFILES IN ESTIMATING THE DEMAND FOR RECREATION; (J) OUTDOOR EDUCATION IN CANADA; (K) TRAINING PHYSICAL EDUCATION SPECIALISTS; (L) LIFETIME SPORTS IN THE PHYSICAL EDUCATION CURRICULUM; AND (M) ROLES OF PROFESSIONAL ORGANIZATIONS IN HPER. (PB)

AVAILABILITY: AMERICAN ALLIANCE FOR HEALTH, PHYSICAL EDUCATION, AND RECREATION, 1201 16TH STREET, N.W., WASHINGTON, D.C. 20036 (NO PRICE QUOTED)

ACCESSION NUMBER: ED107468

PUBLICATION DATE: 71

TITLE: LEARNING TO GET AROUND. AN URBAN ENVIRONMENT MAPPING UNIT.

DESCRIPTOR: CONSERVATION EDUCATION; \*CURRICULUM GUIDES; ELEMENTARY SECONDARY EDUCATION; ENVIRONMENT; \*ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; \*MAP SKILLS; METROPOLITAN AREAS; \*NATURAL RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; TEACHING GUIDES; \*URBAN ENVIRONMENT

DESCRIPTIVE NOTE: 92P.; RELATED DOCUMENTS ARE ED 045 426, ED 107 466-467

THIS UNIT DEALS WITH MAPPING THE URBAN ENVIRONMENT. THE UNIT IS DESIGNED TO HELP THE STUDENT VISUALIZE HIS SURROUNDINGS, READ AND INTERPRET MAPS, AND CREATE MAPS. THESE UNDERSTANDINGS AND SKILLS ARE DESIGNED TO HELP THE STUDENT DEVELOP A SENSE OF SELF-CONTROL AND A SENSE OF PERSONAL CONTROL OVER HIS ENVIRONMENT. THE UNIT IS A STUDENT ORIENTED, AUTO-INSTRUCTIONAL WORKBOOK. IT BEGINS WITH A PRETEST AND IS FOLLOWED BY 16 LESSONS. THE LESSONS INCREASE IN DIFFICULTY AND INVOLVEMENT AS THE STUDENT INCREASES HIS SKILLS IN UNDERSTANDING, READING, AND DRAWING MAPS. THE LESSONS ARE ACTIVITY ORIENTED, AND QUESTIONS ARE ANSWERED THROUGH MEANS OF A SELF-CHECK. THE LESSONS INCLUDE SUCH ACTIVITIES AS A TREASURE HUNT, DRAWING MAPS, USING MAP SYMBOLS, MEASURING, AND DRAWING TO SCALE. THE VARIOUS MAPS NEEDED FOR THE LESSONS ARE ALSO INCLUDED. A TEACHER'S GUIDE FURTHER EXPLAINS THE PURPOSE AND DIRECTIONS FOR EACH LESSON AND SUGGESTS ADDITIONAL INTERDISCIPLINARY ACTIVITIES. COMPLETING THE GUIDE IS A SECTION DEALING WITH AERIAL MAPPING AND ONE DEALING WITH NEIGHBORHOOD INTERVIEWS. (TK)

AVAILABILITY: GEE GROUP FOR ENVIRONMENTAL EDUCATION, INC., 1214 ARCH STREET, PHILADELPHIA, PENNSYLVANIA 19107

ACCESSION NUMBER: ED107473

PUBLICATION DATE: 74

TITLE: URBAN WILD: A MANUAL FOR THE DEVELOPMENT, IMPLEMENTATION, AND OPERATION OF NATURE CENTERS ON SCHOOL CAMPUSES.

PERSONAL AUTHOR: ORTIZ, JAMES L.

DESCRIPTOR: CONSERVATION EDUCATION; \*EDUCATIONAL FACILITIES; ELEMENTARY SECONDARY EDUCATION; \*ENVIRONMENTAL EDUCATION; NATURAL RESOURCES; \*NATURE CENTERS; \*OUTDOOR EDUCATION; PROGRAM GUIDES; \*PROGRAM PLANNING; SCIENCE EDUCATION

DESCRIPTIVE NOTE: 115P.; MARGINAL LEGIBILITY DUE TO COLORED PAGES

THE PURPOSE OF THIS GUIDE IS TO STIMULATE THE DEVELOPMENT OF NATURE CENTERS. THE GUIDE OFFERS POSSIBLE SOLUTIONS FOR COMMON PROBLEMS WHICH MANY SCHOOLS FACE WHEN CONSIDERING AN ON-CAMPUS NATURE CENTER, FOR EXAMPLE, LACK OF READILY AVAILABLE OPEN SPACE, MINIMUM KNOWLEDGE OF HOW TO DEVELOP AND MAINTAIN AN ON-CAMPUS NATURE CENTER, AND LACK OF DETAILED KNOWLEDGE OF HOW TO UTILIZE A NATURE CENTER. THE GUIDE COVERS SUCH TOPICS AS BACKGROUND INFORMATION, SITE SELECTION AND ACQUISITION, MATERIALS ACQUISITION, LAYOUT, CONSTRUCTION TECHNOLOGY, OBTAINING PLANTS, ENCOURAGING WILDLIFE, AND PLANNING A CURRICULUM FOR THE NATURE CENTER. THE APPENDIX LISTS OTHER ON-CAMPUS NATURE CENTERS, AND INDIVIDUALS WHO MAY BE CONTACTED FOR FURTHER ADVICE. (TK)

AVAILABILITY: ERIC/SMEAC, THE OHIO STATE UNIVERSITY, 400 LINCOLN TOWER, COLUMBUS, OHIO 43210 (ON LOAN)

ACCESSION NUMBER: ED108798

PUBLICATION DATE: 70

TITLE: ERIC/CRESS NEWS LETTER, VOLUME 5, NOS. 1, 2, 3, & 4, 1970.

DESCRIPTOR: AMERICAN INDIANS; \*EDUCATIONAL PROGRAMS; FLEXIBLE SCHEDULING; \*LITERATURE REVIEWS; MEXICAN AMERICANS; MIGRANT EDUCATION; \*NEWSLETTERS; \*OUTDOOR EDUCATION; \*RURAL EDUCATION; SMALL SCHOOLS

DESCRIPTIVE NOTE: 17P.

FOUR ISSUES OF VOLUME 5 OF THE ERIC/CRESS (EDUCATIONAL RESEARCH INFORMATION CENTER/CLEARINGHOUSE ON RURAL EDUCATION AND SMALL SCHOOLS) NEWSLETTER ARE COMPILED IN THIS PUBLICATION. THE FIRST ISSUE PRESENTS A PREVIEW OF THE MONOGRAPH "OUTDOOR EDUCATION: A SYNTHESIS" WHICH SYNTHESIZES AND CONCEPTUALIZES THE CURRENT KNOWLEDGE IN OUTDOOR EDUCATION. A PREVIEW OF "A SYNTHESIS OF CURRENT RESEARCH IN MIGRANT EDUCATION" IS GIVEN IN THE SECOND ISSUE. ISSUE NUMBER 3 INCLUDES AN ARTICLE ON FLEXIBLE SCHEDULING—"FLEXIBLE SCHEDULING FOR A SMALL HIGH SCHOOL". ALSO INCLUDED ARE CITATIONS OF DOCUMENTS: (1) ON FLEXIBLE SCHEDULING FOUND IN THE ERIC SYSTEM; (2) FROM THE NATIONAL STUDY OF AMERICAN INDIAN EDUCATION; AND (3) FROM ERIC/CRESS. ARTICLES IN THE FOURTH ISSUE ARE: "PROGRAM TO PREPARE ELEMENTARY PRINCIPALS FOR DISTRICTS WITH MEXICAN AMERICAN AND INDIAN STUDENTS"; "NATIONAL CONFERENCE ON INDIAN EDUCATION"; "FORD FOUNDATION FELLOWSHIPS"; AND "TRAVELING ART STUDIOS BRING CULTURAL STUDIES TO INDIAN SCHOOLS". FOUR DOCUMENTS DEALING WITH PREPARING TEACHERS TO WORK WITH MEXICAN AMERICAN AND AMERICAN INDIAN STUDENTS ARE CITED.  
(NQ)

ACCESSION NUMBER: ED107550

PUBLICATION DATE: JAN 75

TITLE: VALUING YOUTH. LEADER'S NOTEBOOK.

PERSONAL AUTHOR: GLASHAGEL, JERRY; AND OTHERS

DESCRIPTOR: ACHIEVEMENT; ALCOHOL EDUCATION; EDUCATIONAL ENVIRONMENT; \*EDUCATIONAL STRATEGIES; ELEMENTARY EDUCATION; \*LEADERSHIP; \*LEARNING ACTIVITIES; OUTDOOR EDUCATION; PERSONAL VALUES; \*RESOURCE GUIDES; SELF CONCEPT; SELF ESTEEM; \*VALUES

IDENTIFIER: \*YOUTH VALUES PROJECT

DESCRIPTIVE NOTE: 96P.; CARDS USED IN THE "CAMPING SECTION" HAVE BEEN REPRODUCED IN PAGE FORM; FOR RELATED DOCUMENT, SEE ED 107 551

THIS LEADER'S NOTEBOOK IS AN ATTEMPT TO PRESENT VALUE EDUCATION TOOLS FOR PERSONS WORKING WITH ELEMENTARY AGE CHILDREN IN VARIOUS YMCA SETTINGS. THESE TOOLS ARE VALUE EDUCATION STRATEGIES DESIGNED TO STIMULATE DISCUSSION BY THE CHILDREN AND TO HELP CREATE A LEARNING ENVIRONMENT. THE STRATEGIES ARE PRESENTED IN TWO WAYS. FIRST, A SERIES OF BASIC STRATEGIES WE CALL EXPLORING STRATEGIES, CHOOSING STRATEGIES, FOCUSING STRATEGIES, AND LINKING STRATEGIES ARE ORGANIZED AROUND SEVERAL FUNDAMENTAL VALUE ISSUES: COOPERATION, RESPECT, SELF-AWARENESS, ACHIEVEMENT, AND CELEBRATION. THE SECOND SET OF STRATEGIES, FOR SPECIFIC VALUE ISSUES AND VALUE-LADEN SETTINGS, ARE ORGANIZED AROUND SEVERAL SPECIAL YMCA SETTINGS: AN-OVERNIGHT, THE CHRISTMAS HOLIDAYS, CAMPING, COACHING, AND THE INTERNATIONAL SCENE. FINALLY THE SUBJECT OF ALCOHOL USE AND ABUSE IS DEALT WITH THROUGH A SERIES OF STRATEGIES. THIS NOTEBOOK ALSO CONTAINS AN EXPLANATION OF VALUE EDUCATION THEORY AND INFORMATION ON LEADERSHIP TRAINING TOOLS. (AUTHOR/ND)

ACCESSION NUMBER: ED108799

PUBLICATION DATE: 71

TITLE: ERIC/CRESS NEWS LETTER, VOLUME 6, NOS. 1, 2, 3, & 4, 1971.

PERSONAL AUTHOR: CHENOWITH, VIRGINIA K., ED.

DESCRIPTOR: AMERICAN INDIANS; EDUCABLE MENTALLY HANDICAPPED; \*EDUCATIONAL PROGRAMS; \*ETHNIC GROUPS; HANDICAPPED CHILDREN; LIBRARY SERVICES; MEXICAN AMERICANS; MIGRANT EDUCATION; \*NEWSLETTERS; \*OUTDOOR EDUCATION; \*RURAL EDUCATION

DESCRIPTIVE NOTE: 17P.

THE 4 ISSUES OF THE ERIC/CRESS (EDUCATIONAL RESEARCH INFORMATION CENTER/CLEARINGHOUSE ON RURAL EDUCATION AND SMALL SCHOOLS) NEWSLETTER PUBLISHED DURING THE SPRING, SUMMER, FALL, AND WINTER OF 1971 ARE COMPILED. AMONG THE ARTICLES IN THE SPRING ISSUE, WHICH FOCUSES ON AMERICAN INDIAN EDUCATION, ARE: (1) "INDIAN EDUCATION BILL INTRODUCED IN U.S. SENATE" AND (2) "UA TO AID HANDICAPPED INDIAN CHILDREN IN FIRST MODEL PRESCHOOL PROGRAM". ARTICLES GIVEN IN THE SUMMER ISSUE ARE: "SURVIVAL PROGRAM FOR THE EDUCABLE MENTALLY RETARDED, AN OUTDOOR EDUCATION TECHNIQUE"; "STUDENTS TEACHING SPANISH TO TEACHERS"; AND "GRADUATE FELLOWSHIP PROGRAM FOR MINORITIES". NEW CRESS PUBLICATIONS AND CRESS PUBLICATIONS AVAILABLE FROM EDRS (ERIC DOCUMENT REPRODUCTION SERVICE) ARE CITED. THE LEAD ARTICLE IN THE FALL ISSUE IS "MIGRANT RECORDS". TEN CRESS PUBLICATIONS ARE ALSO CITED IN THIS ISSUE. "ENVIRONMENTAL EDUCATION/OUTDOOR EDUCATION: THE ESSENTIAL DIFFERENCES", THE LEAD ARTICLE IN THE WINTER ISSUE, BRIEFLY DISCUSSES THE SIGNIFICANT DIFFERENCES BETWEEN ENVIRONMENTAL AND OUTDOOR EDUCATION. SIX NEW CRESS PUBLICATIONS ARE CITED. (NQ)

ACCESSION NUMBER: ED108800

PUBLICATION DATE: 72

TITLE: ERIC/CRESS NEWS LETTER, VOLUME 7, NOS. 1, 2, 3, & 4, 1972.

PERSONAL AUTHOR: CHENOWITH, VIRGINIA K., ED.

DESCRIPTOR: AMERICAN INDIANS; BIBLIOGRAPHIES; CAREER EDUCATION; \*EDUCATIONAL DEVELOPMENT; FEDERAL LEGISLATION; JUNIOR COLLEGES; MEXICAN AMERICANS; MIGRANT EDUCATION; \*NEWSLETTERS; OUTDOOR EDUCATION; \*REFERENCE MATERIALS; \*RURAL DEVELOPMENT; \*RURAL EDUCATION

DESCRIPTIVE NOTE: 23P.

THE ARTICLES IN THIS GROUP OF ERIC/CRESS (EDUCATIONAL RESEARCH INFORMATION CENTER/CLEARINGHOUSE ON RURAL EDUCATION AND SMALL SCHOOLS) NEWSLETTERS COVER SUCH TOPICS AS FEDERAL LEGISLATION AND RURAL DEVELOPMENT, THE CONGRESO NACIONAL DE ASUNTOS COLEGIALES, THE FOXFIRE PROJECT, CAREER EDUCATION, BILINGUAL INSTRUCTION, RURAL EDUCATION, NATIVE AMERICAN STUDIES AND OUTDOOR EDUCATION. THE FIRST ISSUE PRESENTS A BRIEF OVERVIEW OF PENDING FEDERAL LEGISLATION AFFECTING RURAL DEVELOPMENT. CITATIONS ARE GIVEN FOR SOME SELECTED PUBLICATIONS ON RURAL AREAS WHICH APPEARED IN THE OCTOBER 1971 THROUGH MARCH 1972 ISSUES OF "RESEARCH IN EDUCATION" (RIE). "CONGRESO NACIONAL DE ASUNTOS COLEGIALES AND THE CHICANOS IN THE COMMUNITY/JUNIOR COLLEGES" AND "THE FOXFIRE PROJECT" ARE AMONG THE ARTICLES IN THE SECOND ISSUE. FIFTY PUBLICATIONS WHICH APPEARED IN THE APRIL AND MAY 1972 ISSUES OF RIE ARE CITED. ARTICLES IN THE THIRD ISSUE ARE: "CAREER EDUCATION IN RURAL SCHOOLS"; "CARRASCOLENDAS: BILINGUAL INSTRUCTION THROUGH TELEVISION"; "A MAJOR BREAKTHROUGH IN LANGUAGE BARRIERS"; "ISSUES IN RURAL EDUCATION: CONSOLIDATION"; AND "NATIVE AMERICAN STUDIES". "THE 'OUTDOOR ADVENTURE IN EDUCATION' EXPLOSION" AND "ISSUES IN RURAL EDUCATION: THE RURAL TEACHER" ARE THE MAJOR ARTICLES IN THE FOURTH ISSUE. SIXTY-SEVEN PUBLICATIONS FROM THE NOVEMBER 1972-JANUARY 1973 RIE ISSUES ARE CITED. (NQ)

ACCESSION NUMBER: ED108806

PUBLICATION DATE: MAY 75

TITLE: SCIENCE IN RURAL SCHOOLS.

PERSONAL AUTHOR: CRONE, BURNELL

DESCRIPTOR: \*ELEMENTARY SCIENCE; OUTDOOR EDUCATION; \*RURAL SCHOOLS; \*SCIENCE INSTRUCTION; \*SCIENCE PROJECTS; SCIENCE UNITS; UNITS OF STUDY (SUBJECT FIELDS)

IDENTIFIER: \*ALASKA

DESCRIPTIVE NOTE: 2P.; FOR RELATED DOCUMENTS, SEE ED 108 802-807

ALASKA IS ONE OF THE MOST IDEAL SETTINGS FOR TEACHING SCIENCE. IN MOST OF THE RURAL AREAS, SCIENCE MATERIALS ARE IN ABUNDANCE STARTING ALMOST AT THE SCHOOL'S DOOR STEPS TO A DISTANCE AS FAR AS A PERSON WOULD LIKE TO GO. THEREFORE, IT IS QUITE POSSIBLE TO DEVELOP SCIENCE PROJECTS FOR ALL GRADES. SOME OF THE PROJECTS CAN BE DONE IN THE SIMPLEST WAYS WHILE AT THE SAME TIME STIMULATING LEARNING AND CREATING A BETTER UNDERSTANDING OF ONE'S ENVIRONMENT. THIS PAPER BRIEFLY DISCUSSES SCIENCE IN ALASKA'S RURAL SCHOOLS. ALSO GIVEN ARE: (1) A GENERAL OUTLINE FOR STUDY AND (2) A PARTIAL LIST OF SCIENCE PROJECTS. (AUTHOR/NQ)

AVAILABILITY: NOT AVAILABLE SEPARATELY, SEE ED 108 802

ACCESSION NUMBER: ED108807

PUBLICATION DATE: MAY 75

TITLE: SUMMER CAMP.

PERSONAL AUTHOR: PFISTERER, BILL

DESCRIPTOR: ACTIVITY LEARNING; \*CAMPING; ELEMENTARY  
SECONDARY EDUCATION; \*LEARNING EXPERIENCE; \*OUTDOOR  
EDUCATION; \*PROGRAM DESCRIPTIONS; \*SUMMER PROGRAMS

IDENTIFIER: \*ALASKA

DESCRIPTIVE NOTE: 3P.; FOR RELATED DOCUMENTS, SEE ED 108  
802-806

ABOUT 50 PARTICIPANTS AND 8 SUPERVISORS ATTENDED THE SUMMER CAMP. VISITORS WERE ENCOURAGED AND PARENTS OFTEN CAME TO SEE WHAT THEIR KIDS WERE DOING. BEFORE ARRIVING AT CAMP, THE STUDENTS LEARNED HOW IMPORTANT BALANCING THE SUPPLIES WAS WHEN LOADING THE BOATS. ON THE WAY TO CAMP, STUDENTS STUDIED THE: (1) LANDMARKS SO THAT THEY COULD FIND THEIR WAY BY THEMSELVES NEXT TIME AND (2) RIVER'S TOPOGRAPHY SO THAT THEY COULD GO WITH THE CURRENT AND AVOID SAND BARS. AT THE CAMP, THE STUDENTS GATHERED SOME OF THEIR OWN FOOD. THEY LEARNED HOW TO SET OUT TRAPS AND NETS AND TO FISH. BUILDING A CANVAS CANOE FROM SCRATCH WAS A MAIN ACTIVITY. A SMOKEHOUSE WAS BUILT BY THE STUDENTS WITH THE HELP OF THE CONSULTANTS FOR SMOKING FISH AT CAMP. OTHER CAMP ACTIVITIES WERE: WHITTLING, KNIFE SHARPENING, SWIMMING, BEADING, CROCHETING, COOKING, SNARING, AND BERRY-PICKING. (NQ)

AVAILABILITY: NOT AVAILABLE SEPARATELY, SEE ED 108 802.

ACCESSION NUMBER: ED108874

PUBLICATION DATE: JUL 74

TITLE: SUGGESTIONS AND PROCEDURES FOR DEVELOPING TEACHING-LEARNING STATIONS. REVISED.

PERSONAL AUTHOR: HENDREN, TRAVIS E.; BRYANT, C. DOUGLAS

DESCRIPTOR: CONSERVATION EDUCATION; \*EDUCATIONAL PROGRAMS; ELEMENTARY SECONDARY EDUCATION; ENVIRONMENT; \*ENVIRONMENTAL EDUCATION; \*FIELD INSTRUCTION; \*INSTRUCTIONAL MATERIALS; NATURAL RESOURCES; \*OUTDOOR EDUCATION; PROGRAM PLANNING; RECREATION; SCIENCES; TEACHING GUIDES

IDENTIFIER: LEARNING STATIONS; TEACHING STATIONS

DESCRIPTIVE NOTE: 68P.; LISTED AS APPENDIX F OF ED 108 876; FOR RELATED DOCUMENTS SEE, ED 108 875-876

THIS BOOKLET IS A COLLECTION OF OUTLINES FOR VARIOUS TEACHING-LEARNING STATIONS WHICH WERE DEVELOPED BY 21 TEACHERS DURING A THREE-WEEK INSTITUTE HELD IN 1972 AT BARNARDSVILLE, NORTH CAROLINA. THE PURPOSES FOR SUCH STATIONS, WHICH CAN BE DEVELOPED INEXPENSIVELY BY STUDENTS AND TEACHERS ON SCHOOL PROPERTY, ARE: (1) TO CREATE OUTDOOR AND ENVIRONMENTAL AWARENESS, (2) TO CREATE OUTDOOR RECREATION AND ENVIRONMENTAL SENSITIVITY, (3) TO PROVIDE OCCUPATIONAL EXPLORATION, AND (4) TO PROVIDE OCCUPATIONAL TRAINING. TWENTY-NINE STATIONS ARE INCLUDED IN THE BOOKLET. EACH STATION OUTLINE INCLUDES: (1) TITLE OF THE TEACHING-LEARNING STATION; (2) DESCRIPTION OF THE STATION; (3) RATIONALE; (4) REQUIREMENTS FOR LAND, EQUIPMENT, FACILITIES, AND TIME FOR DEVELOPMENT; (5) RESOURCES; AND (6) FUTURE FARMER OF AMERICA AND SUPERVISED OCCUPATIONAL EXPERIENCE USES. STATIONS SUCH AS A NATURE TRAIL, SOIL PROFILE, WEATHER STATION, FISH POND, AND PLANT AND INSECT DISPLAY ARE INCLUDED. COMPLETING THE BOOKLET ARE VARIOUS LISTS, INCLUDING LISTS OF RELATED BOOKS, MAGAZINES AND BOOKLETS, SLIDE SOURCES, FILM SOURCES, AND RESOURCE AGENCIES. (TK)

ACCESSION NUMBER: ED108875

PUBLICATION DATE: SEP 74

TITLE: SUGGESTIONS AND PROCEDURES IN DEVELOPING NATURE TRAILS. REVISED.

PERSONAL AUTHOR: HENDREN, TRAVIS E.; LENK, ALAN

DESCRIPTOR: ART; CONSERVATION EDUCATION; \*EDUCATIONAL PROGRAMS; ELEMENTARY SECONDARY EDUCATION; ENVIRONMENT; \*FIELD INSTRUCTION; INSTRUCTIONAL MATERIALS; \*INTERDISCIPLINARY APPROACH; LANGUAGE ARTS; NATURAL RESOURCES; OUTDOOR EDUCATION; SCIENCES; SOCIAL STUDIES; \*TEACHING GUIDES; \*TRAILS

IDENTIFIER: \*NORTH CAROLINA

DESCRIPTIVE NOTE: 34P.; LISTED AS APPENDIX E OF ED 108 876; FOR RELATED DOCUMENTS SEE, ED 103 874-876

THOUGH PUBLIC NATURE TRAILS HAVE BEEN IN USE SINCE THE LATE 1800'S, THEIR USE ON SCHOOL GROUNDS FOR EDUCATIONAL PURPOSES IS A RELATIVELY NEW CONCEPT. THE NATURE TRAIL IS AN IMPORTANT TOOL FOR TEACHING ENVIRONMENTAL AWARENESS AND APPRECIATION. IT PROVIDES EXPERIENCES FOR OBSERVING NATURE FIRSTHAND WITH ALL SENSES EMPLOYED. IT IS A RESOURCE THAT IS AVAILABLE TO THE ENTIRE SCHOOL AND IS APPLICABLE TO ALL CURRICULUM AREAS. THE PURPOSE OF THIS BOOKLET IS TO PROVIDE INFORMATION FOR TEACHERS, ADMINISTRATORS AND STUDENTS ON HOW THEY MAY PLAN AND DEVELOP A NATURE TRAIL AT THEIR SCHOOL. LOCATING THE TRAIL, TRAIL CONSTRUCTION, TRAIL INTERPRETATION, AND MAINTENANCE ARE COVERED IN SECTION 1. SECTION 2 FOCUSES ON ART, SCIENCE-MATH, LANGUAGE ARTS, AND SOCIAL STUDIES ACTIVITIES WHICH COULD EVOLVE FROM CLASSROOM USE OF THE NATURE TRAIL. SECTION 3 PROVIDES IDEAS AND EXAMPLES OF TRAIL TOPICS SUCH AS A MARSH TRAIL, HISTORICAL TRAIL, WOOD TRAIL, AND GEOLOGY TRAIL. EXAMPLES OF OUTDOOR DEMONSTRATIONS AND CHARTS ARE ALSO INCLUDED IN THIS SECTION. SECTION 4 IS A LIST OF ENVIRONMENTAL EDUCATION SOURCES AND AIDS INCLUDING ASSOCIATIONS, BOOKS, MAGAZINES, FILMS, AND RESOURCE PEOPLE. THE BOOKLET CONCLUDES WITH A LIST OF OUTSTANDING NATURE TRAILS LOCATED IN NORTH CAROLINA.  
(AUTHOR/TK)

ACCESSION NUMBER: ED108876

PUBLICATION DATE: OCT 74

TITLE: OUTDOOR RECREATION AND APPLIED ECOLOGY. REVISED.

PERSONAL AUTHOR: HENDREN, TRAVIS E.; AND OTHERS.

DESCRIPTOR: \*CAREER CHOICE; \*CAREER EDUCATION; CONSERVATION EDUCATION; CURRICULUM GUIDES; ENVIRONMENTAL EDUCATION; \*INSTRUCTIONAL MATERIALS; NATURAL RESOURCES; OUTDOOR EDUCATION; RECREATION; SCIENCE EDUCATION; SECONDARY EDUCATION; \*TEACHING GUIDES; WILDLIFE MANAGEMENT

DESCRIPTIVE NOTE: 297P.; SEE ED 108 874-875 FOR A SEPARATE LISTING OF APPENDIX E AND F

THIS CURRICULUM GUIDE OFFERS GUIDELINES FOR STRUCTURING A COURSE WHICH EXPOSES THE STUDENTS TO VARIOUS ENVIRONMENTAL CAREERS. THE GUIDE IS DIVIDED INTO THREE SECTIONS. THE FIRST SECTION OFFERS INFORMATION ABOUT SUCH A COURSE: COURSE DESCRIPTION, PURPOSE, CREDITS, SPECIAL OR UNIQUE ASPECTS, PHYSICAL FACILITIES, EQUIPMENT, MAJOR MATERIALS, TEACHER CERTIFICATION, AND EVALUATION. SECTION TWO INCLUDES 26 TEACHING UNITS SUCH AS ECOLOGICAL SYSTEMS, CONSTRUCTION FOR OUTDOOR RECREATION, CAMP MANAGEMENT OPERATION, AND AIR IN THE ENVIRONMENT. EACH UNIT CONTAINS A WORK SHEET WITH UNIT TITLE, UNIT OBJECTIVES, TEACHING SEQUENCE, UNIT LENGTH, PREREQUISITES, EVALUATION, INSTRUCTION MATERIALS, AND GENERAL COMMENTS. THE UNIT GUIDELINES INCLUDE THE TITLE OF THE UNIT, TEACHING OBJECTIVES, CONTENT, SUGGESTED TEACHING-LEARNING EXPERIENCES, SUGGESTED EVALUATION METHODS, AND SUGGESTED RESOURCE MATERIALS. THE THIRD SECTION CONTAINS SIX APPENDICES: SOURCES OF ADDITIONAL REFERENCE MATERIALS, REGIONAL LISTING OF NATURAL AND MAN-MADE ENVIRONMENTAL LOCATIONS IN NORTH CAROLINA, FILMS AND VISUAL MATERIALS, ENVIRONMENTAL YEARBOOKS, SUGGESTIONS AND PROCEDURES IN DEVELOPING NATURE TRAILS, AND SUGGESTIONS AND PROCEDURES FOR DEVELOPING TEACHING-LEARNING STATIONS. (TK)

ACCESSION NUMBER: ED108886

PUBLICATION DATE: 75

TITLE: THE WORLD OF ENDANGERED WILDLIFE. FILMSTRIP, CASSETTE TAPE NARRATION, TEACHER'S GUIDE, TWO COPIES OF NATIONAL WILDLIFE MAGAZINE'S SPECIAL ISSUE ON ENDANGERED SPECIES, STATE-BY-STATE LIST OF ENDANGERED ANIMALS, AND WILDLIFE NOTES.

DESCRIPTOR: AUDIOVISUAL AIDS; AUDIOVISUAL INSTRUCTION; CONSERVATION EDUCATION; ECOLOGY; ENVIRONMENTAL EDUCATION; \*FILMSTRIPS; \*INSTRUCTIONAL MATERIALS; \*NATURAL RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; \*TEACHING GUIDES; \*WILDLIFE MANAGEMENT

IDENTIFIER: ENDANGERED SPECIES

DESCRIPTIVE NOTE: 176P.; PLUS CASSETTE TAPE AND FILMSTRIP

THE GRADUAL DISAPPEARANCE OF MANY SPECIES OF WILDLIFE, TOO OFTEN A PRELUDE TO EXTINCTION, IS A PROBLEM OF LARGE PROPORTIONS AND INCREASING URGENCY. THIS FILMSTRIP KIT IS DESIGNED TO HELP STUDENTS AND TEACHERS TO UNDERSTAND THE MORE SERIOUS THREATS TO ENDANGERED SPECIES, WHAT IS BEING DONE ABOUT THEM, AND HOW THE INDIVIDUAL CAN HELP. THE KIT CONTAINS A FILMSTRIP ENTITLED "THE WORLD OF ENDANGERED WILDLIFE" AND AN ACCOMPANYING CASSETTE TAPE. THE TEACHER'S GUIDE, INCLUDED IN THE KIT, PROVIDES THE FILMSTRIP NARRATION AND PHOTOS OF THE FILMSTRIP FRAMES. ALSO INCLUDED IN THE GUIDE IS A SECTION OF DISCUSSION QUESTIONS AND ACTIVITIES WHICH CORRELATE WITH THE FILMSTRIP. TOPICS IN THIS SECTION INCLUDE: THE BIGGEST ANIMAL EVER, HISTORY AND EXTINCTION, AND SEEING ENDANGERED WILDLIFE. THE KIT ALSO CONTAINS A LIST OF ENDANGERED SPECIES BY STATE; WILDLIFE NOTES ON THE CALIFORNIA CONDOR, THE AMERICAN PEREGRINE FALCON, THE FLORIDA MANATEE, THE BLACK FOOTED FERRET, AND THE DEVIL'S HOLE PUPFISH; AND TWO SPECIALLY BOUND COPIES OF THE APRIL-MAY 1974 ISSUE OF "NATIONAL WILDLIFE" ON ENDANGERED SPECIES. (TK)

AVAILABILITY: THE NATIONAL WILDLIFE FEDERATION, 1412 16TH STREET, N.W., WASHINGTON, D.C. 20036 (\$22.50)

ACCESSION NUMBER: ED108890

PUBLICATION DATE: 71

TITLE: HORSE MANURE AND OTHER FUN PROJECTS. FIELD STUDIES AND LABORATORY EXPERIENCES IN ENVIRONMENTAL BIOLOGY - A BOOK OF EXPERIMENTAL IDEAS FOR SECONDARY SCHOOL BIOLOGY TEACHERS.

PERSONAL AUTHOR: BROWN, ROBERT T., ED.; CLARK, BARBARA G., ED.

DESCRIPTOR: \*BIOLOGICAL SCIENCES; BIOLOGY; CONSERVATION EDUCATION; \*ENVIRONMENTAL EDUCATION; \*INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; NATURAL RESOURCES; OUTDOOR EDUCATION; \*SCIENCE EDUCATION; SECONDARY EDUCATION; \*TEACHING GUIDES

DESCRIPTIVE NOTE: 140P.; THE PRODUCT OF A CONFERENCE HELD ON ISLE ROYALE NATIONAL PARK, JUNE 1971. BEST COPY AVAILABLE; OCCASSIONAL MARGINAL LEGIBILITY

THIS GUIDE CONTAINS A COLLECTION OF LABORATORY AND FIELD INQUIRIES DESIGNED TO PROMOTE ECOLOGICAL AWARENESS, SENSITIVITY, AND UNDERSTANDING. THE ACTIVITIES COMPILED BY 28 TEACHERS ARE FOR USE IN TEACHING BIOLOGY AT THE SECONDARY LEVEL. THEY ARE PRESENTED IN A "RECIPE" FORM TO MAKE IT POSSIBLE FOR TEACHERS WITHOUT PRIOR EXPERIENCE OR TRAINING TO USE THE ACTIVITIES WITH EASE AND CONFIDENCE. THE EXPERIMENTS ARE GENERALLY OPEN-ENDED, LEAVING THE TEACHER AND STUDENTS WITH EXTENSIONS FOR FURTHER ACTIVITIES. NINE CHAPTERS ARE INCLUDED IN THE GUIDE: PLANNING OUTDOOR FIELD EXPERIENCES; FIELD STUDIES, PHYSICAL FACTORS; FIELD STUDIES, PLANTS; FIELD STUDIES, ANIMALS; FIELD STUDIES; SUCCESSION; FIELD STUDIES, WATER ORGANISMS; LABORATORY STUDIES; HUMAN ECOLOGY, POLLUTION, AND POPULATION; AND PERMANENT OUTDOOR FACILITIES DEVELOPMENT AND USE. EACH CHAPTER CONTAINS A NUMBER OF ACTIVITIES. THE ACTIVITIES CONTAIN, WHEN APPROPRIATE: THE PURPOSE, PROCEDURES, MATERIALS, OBSERVATIONS, SUGGESTIONS AND DISCUSSION TOPICS, AND CONCLUSIONS. A REFERENCE SECTION INCLUDING BOOKS, PROGRAMS, AND RESOURCE PEOPLE COMPLETES THE GUIDE. (TK)

ACCESSION NUMBER: ED110234

PUBLICATION DATE: APR 75

TITLE: AN EVALUATIVE STUDY OF SOME SUPPLEMENTARY FREE AND INEXPENSIVE MATERIALS AVAILABLE FOR USE BY MIDDLE-GRADE CLASSROOMS INVOLVED IN OUTDOOR EDUCATION.

PERSONAL AUTHOR: MIELKE, SANDRA LEE

DESCRIPTOR: COSTS; EDUCATIONAL OBJECTIVES; \*EVALUATION METHODS; \*INSTRUCTIONAL MATERIALS; \*INTERMEDIATE GRADES; LITERATURE REVIEWS; \*OUTDOOR EDUCATION; RESOURCE MATERIALS; \*SURVEYS

DESCRIPTIVE NOTE: 48P.

IN AN EFFORT TO DETERMINE THE "HOW, WHAT, WHEN, AND INTENT" OF OUTDOOR EDUCATION, THIS BRIEF REPORT IS BASED UPON A SURVEY OF AVAILABLE FREE AND INEXPENSIVE INSTRUCTIONAL MATERIALS RELATIVE TO MIDDLE-GRADE OUTDOOR EDUCATION. A REVIEW OF PERTINENT LITERATURE IS PRESENTED AND SOME ANALYZATION IS PROVIDED RELATIVE TO THE FACTORS AND RATIONALE INFLUENCING TEACHERS IN THE ACQUISITION AND SELECTION OF SUPPLEMENTARY INSTRUCTIONAL MATERIALS. A PROCEDURAL PRESENTATION IS MADE FOR THE ACQUISITION OF FREE AND INEXPENSIVE MATERIALS WHICH INCLUDES REFERENCE TO AN ATTITUDE SCALE AND THE FOLLOWING SOURCES: (1) PERIODICALS; (2) SPECIAL EDUCATION PUBLICATIONS; (3) BIBLIOGRAPHIES FOR SUBJECT MATTER AREAS; (4) PUBLISHER'S METHODS AND SUPPLEMENTARY SOURCE BOOKS; (5) SOURCE INDEXES; AND (6) GOVERNMENT SOURCES. CONCLUDING FROM THE SURVEY THAT NOT ALL MATERIALS REQUESTED AND RECEIVED ARE SUITABLE, IT IS SUGGESTED THAT TEACHERS: (1) USE ONLY THE MOST RECENT REFERENCES; (2) CONSIDER THE POSSIBILITY OF UTILIZING LOCAL ORGANIZATIONS FOR MAINTAINING UP-TO-DATE FILES; AND (3) TAKE ADVANTAGE OF THE SERVICES PROVIDED BY SUCH ORGANIZATIONS AS THE NATIONAL SCIENCE TEACHERS ASSOCIATION. APPENDICES PRESENT: SURVEY FORM LETTERS; THE SURVEY EVALUATION INSTRUMENT; AND SOME 25 INSTRUCTIONAL MATERIALS CITATIONS WHICH INCLUDE SUBJECT MATTER DESIGNATION, TITLE, PUBLISHER, COST, AND EVALUATION COMMENTS. (JC)

ACCESSION NUMBER: ED110324

PUBLICATION DATE: 75

TITLE: CONSERVATION DIRECTORY, 1975.

PERSONAL AUTHOR: DECKER, GLORIA H., ED.

DESCRIPTOR: AGENCIES; \*CONSERVATION EDUCATION;  
\*DIRECTORIES; \*ENVIRONMENT; ENVIRONMENTAL EDUCATION;  
\*GUIDES; \*INDEXES (LOCATORS); NATURAL RESOURCES; OUTDOOR  
EDUCATION; SCIENCE EDUCATION; WILDLIFE MANAGEMENT

IDENTIFIER: \*NATIONAL WILDLIFE FEDERATION

DESCRIPTIVE NOTE: 220P.

THIS ANNUAL DIRECTORY CONTAINS LISTS OF ORGANIZATIONS, AGENCIES, AND OFFICIALS CONCERNED WITH NATURAL RESOURCE USE AND MANAGEMENT. FIVE INDEXES ARE INCLUDED IN THE FIRST SECTION OF THE DIRECTORY: (1) U.S. FEDERAL DEPARTMENTS, AGENCIES, AND OFFICES; (2) INTERNATIONAL, NATIONAL, INTERSTATE ORGANIZATIONS, AND COMMISSIONS; (3) STATE, TERRITORIAL AGENCIES, AND CITIZENS' GROUPS; (4) CANADIAN FEDERAL GOVERNMENT AGENCIES AND NATIONAL CITIZENS' GROUPS; AND (5) CANADIAN PROVINCIAL GOVERNMENT DEPARTMENTS AND CITIZENS' GROUPS. FOLLOWING THE INDEXES ARE 15 LISTINGS COVERING SUCH AREAS AS U.S. CONGRESSIONAL COMMITTEES, U.S. INDEPENDENT AGENCIES, COLLEGES AND UNIVERSITIES, DIRECTORIES OF INTEREST, AND AUDIO-VISUAL SOURCE INFORMATION. WHERE POSSIBLE, ADMINISTRATORS, DEPARTMENTS, DUTIES AND FUNCTIONS, ANNUAL EVENTS, PUBLICATIONS, ADDRESSES, AND PHONE NUMBERS ARE INCLUDED WITH THE LISTING. THE DIRECTORY CONCLUDES WITH A PERSONAL NAME INDEX. (TK)

AVAILABILITY: NATIONAL WILDLIFE FEDERATION, 1412 16TH STREET, N.W., WASHINGTON, D.C. 20036 (ITEM NO. 79534 TC, \$2.50)

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PART II: CITATIONS FROM  
CURRENT INDEX TO JOURNALS IN EDUCATION

ACCESSION NUMBER: EJ103441

PUBLICATION DATE: OCT 74

TITLE: GETTING PSYCHED UP AT ROUND MEADOW

PERSONAL AUTHOR: THOMSON, PEGGY

DESCRIPTOR: \*LABORATORY SCHOOLS; \*ELEMENTARY SCHOOL STUDENTS; \*OUTDOOR EDUCATION; \*INTERDISCIPLINARY APPROACH; \*PROGRAM EVALUATION; LEARNING EXPERIENCE; EDUCATIONAL ENVIRONMENT; STUDENT REACTION

A MOUNTAIN PARK PROGRAM FOR SIXTH-GRADERS FROM WASHINGTON, D. C., IS NOT ONLY INSTRUCTIVE BUT SEEMS TO KINDLE RENEWED ZEST FOR LEARNING. (EDITOR)

JOURNAL CITATION: AMERICAN EDUCATION; 10; 8; 11-5

ACCESSION NUMBER: EJ103864

PUBLICATION DATE: FEB/MAR 74

TITLE: KNOWLEDGE-AND INTEREST-CHANGE OUTCOMES FROM A MINI-COURSE ON CONSERVATION EDUCATION

PERSONAL AUTHOR: GROVES, DAVID L.; CAULEY, VIRGIL B.

DESCRIPTOR: \*EDUCATIONAL METHODS; \*COLLEGE STUDENTS; \*EDUCATIONAL INNOVATION; \*OUTDOOR EDUCATION; \*CONSERVATION EDUCATION; RESEARCH PROJECTS; INTERESTS

THE PURPOSE OF THIS STUDY WAS TO EVALUATE THE POSSIBLE CHANGES THAT COULD OCCUR IN KNOWLEDGE AND INTEREST WHEN A LECTURE-DEMONSTRATION APPROACH IS REINFORCED WITH AN OUTDOOR EXPERIENCE. (AUTHOR)

JOURNAL CITATION: COLLEGE STUDENT JOURNAL; 8; 1; 77-82

ACCESSION NUMBER: EJ104729

PUBLICATION DATE: F-W 74

TITLE: ENVIRONMENTAL/OUTDOOR EDUCATION -- A MAJOR PRIORITY

PERSONAL AUTHOR: ROSS, SAMUEL B., JR.

DESCRIPTOR: \*ANIMAL SCIENCE; \*ENVIRONMENTAL EDUCATION;  
\*OUTDOOR EDUCATION; \*PROGRAM DEVELOPMENT; COMMUNITY  
INVOLVEMENT; EDUCATIONAL FACILITIES; INTERAGENCY  
COOPERATION; NATURAL RESOURCES; RESIDENT CAMP PROGRAMS

IDENTIFIER: \*NEW YORK; GREEN CHIMNEYS SCHOOL

SEVERAL TIMELY FACTORS WHICH WERE CONSIDERED IN THE  
DEVELOPMENT OF THE OUTDOOR EDUCATION AND FARM DEMONSTRATION  
CENTER (GREEN CHIMNEYS SCHOOL, BREWSTER, NEW YORK) AND THE  
NEARBY EDWIN GOULD OUTDOOR EDUCATION CENTER ARE DISCUSSED.  
(AUTHOR/KM)

JOURNAL CITATION: COMMUNICATOR; 6; 1; 8-10

ACCESSION NUMBER: EJ104731

PUBLICATION DATE: F-W 74

TITLE: EXPLORING THE LICHENS - AN OUTDOOR SCIENCE TECHNIQUE

PERSONAL AUTHOR: RILLO, THOMAS J.

DESCRIPTOR: \*MICROBIOLOGY; \*OUTDOOR EDUCATION; \*PLANT  
IDENTIFICATION; \*RURAL AREAS; EVOLUTION; FOOD; MAGNIFICATION  
METHODS; NATURAL RESOURCES; ROLE THEORY; SOIL SCIENCE

IDENTIFIER: \*LICHENS

JOURNAL CITATION: COMMUNICATOR; 6; 1; 20-3

ACCESSION NUMBER: EJ104732

PUBLICATION DATE: F-W 74

TITLE: THE ROLL (ROLE) OF PHYSICAL EDUCATION AND HEALTH IN  
OUTDOOR AND ENVIRONMENTAL EDUCATION

PERSONAL AUTHOR: LORET, JOHN

DESCRIPTOR: \*ENVIRONMENTAL EDUCATION; \*HEALTH ACTIVITIES;  
\*OUTDOOR EDUCATION; \*PHYSICAL EDUCATION; \*ROLE PERCEPTION;  
HUMAN BODY; NATURAL RESOURCES; PSYCHOMOTOR SKILLS; PHYSICAL  
FITNESS; SKILL DEVELOPMENT

JOURNAL CITATION: COMMUNICATOR; 6; 1; 24-5

ACCESSION NUMBER: EJ104733

PUBLICATION DATE: F-W 74

TITLE: GO CLIMB A ROCK

PERSONAL AUTHOR: AUGUST, IRWIN

DESCRIPTOR: \*NATURAL RESOURCES; \*OUTDOOR EDUCATION; \*SKILL  
DEVELOPMENT; \*SAFETY EDUCATION; ACCIDENT PREVENTION;  
EQUIPMENT STANDARDS; PSYCHOMOTOR SKILLS; PHYSICAL EDUCATION;  
SAFETY EQUIPMENT

IDENTIFIER: \*ROCK CLIMBING

THE BASICS OF ROCK AND MOUNTAIN CLIMBING ARE EXPLAINED,  
COVERING RAPPELLING, THE USE OF ROPES, OTHER EQUIPMENT,  
ACCIDENTS, AND PLACES TO CLIMB. (KM)

JOURNAL CITATION: COMMUNICATOR; 6; 1; 26-9

ACCESSION NUMBER: EJ104734

PUBLICATION DATE: F-W 74

TITLE: "A SYMPHONY" -- OUTDOOR EDUCATION FOR A FIFTH GRADE

PERSONAL AUTHOR: DRUFFNER, JEAN

DESCRIPTOR: \*GRADE 5; \*NATURAL RESOURCES; \*OUTDOOR  
EDUCATION; \*TRAILS; MORALE; PROGRAM DESCRIPTIONS; REWARDS;  
TEAMWORK

IDENTIFIER: \*SLIDE MOUNTAIN; WOODSTOCK; NEW YORK

THE ARTICLE DESCRIBES A HIKE UP SLIDE MOUNTAIN (NEW YORK)  
UNDERTAKEN BY THE 5TH GRADE CLASS OF PHOENICIA ELEMENTARY  
SCHOOL (WOODSTOCK). (KM)

JOURNAL CITATION: COMMUNICATOR; 6; 1; 34-5

ACCESSION NUMBER: EJ104735

PUBLICATION DATE: F-W 74

TITLE: OUTDOOR EDUCATION IN A LIBERAL ARTS SETTING

PERSONAL AUTHOR: HILL, GREGORY

DESCRIPTOR: \*OUTDOOR EDUCATION; \*PRIVATE COLLEGES;  
\*RECREATIONAL FACILITIES; \*WATER RESOURCES; CONSERVATION  
(ENVIRONMENT); LIBERAL ARTS; NATURAL RESOURCES; PROGRAM  
DESCRIPTIONS; UNDERGRADUATE STUDY

IDENTIFIER: \*NEW YORK; PINE LAKE; HARTWICK COLLEGE

HARTWICK COLLEGE, IN 1971, PURCHASED A FORMER 1,000 ACRE  
VACATION RESORT, PINE LAKE (NEW YORK). THE 12 ACRE LAKE AND  
ADJOINING LANDS OFFER HARTWICK STUDENTS AND OTHERS  
EDUCATIONAL AS WELL AS RECREATIONAL OPPORTUNITIES. (KM)

JOURNAL CITATION: COMMUNICATOR; 6; 1; 36-8

ACCESSION NUMBER: EJ104736

PUBLICATION DATE: F-W 74

TITLE: A GRANDDAUGHTER LOOKS AT: JOHN BURROUGHS AND OUTDOOR EDUCATION

PERSONAL AUTHOR: KELLEY, ELIZABETH BURROUGHS

DESCRIPTOR: \*ADULT LEADERS; \*AUTHORS; \*BIOGRAPHICAL INVENTORIES; \*OUTDOOR EDUCATION; CULTURAL BACKGROUND; HISTORY; NATURAL RESOURCES; NATURAL SCIENCES; RURAL FARM RESIDENTS; TEACHER ATTITUDES

IDENTIFIER: \*BURROUGHS (JOHN)

JOHN BURROUGHS (1837-1921) DID MORE THAN ANYONE ELSE IN HIS TIME, THROUGH HIS BOOKS AND MAGAZINE ARTICLES, TO CREATE AN INTEREST IN THE NATURAL SCIENCES AND OUTDOOR LIFE. WHEN ASKED HOW TO TEACH CHILDREN TO LOVE NATURE, HE REPLIED, "DO NOT TRY TO TEACH THEM AT ALL. JUST TURN THEM LOOSE IN THE COUNTRY AND TRUST TO LUCK." (AUTHOR/KM)

JOURNAL CITATION: COMMUNICATOR; 6; 1; 40-1

ACCESSION NUMBER: EJ104738

PUBLICATION DATE: F-W 74

TITLE: OUTDOOR EDUCATION: STIMULUS FOR LEARNING

PERSONAL AUTHOR: GENTILE, GLORIA

DESCRIPTOR: \*ENRICHMENT ACTIVITIES; \*INTEGRATED ACTIVITIES; \*OUTDOOR EDUCATION; \*STUDENT MOTIVATION; \*TEACHING TECHNIQUES; FIELD INSTRUCTION; NATURAL RESOURCES; PERCEPTUAL DEVELOPMENT

JOURNAL CITATION: COMMUNICATOR; 6; 1; 48-50

ACCESSION NUMBER: EJ104827

PUBLICATION DATE: SEP/OCT 74

TITLE: EXPLORING A VACANT LOT: AN OUTDOOR TEACHING TECHNIQUE

PERSONAL AUTHOR: RILLO, THOMAS J.

DESCRIPTOR: \*ENVIRONMENTAL EDUCATION; \*FIELD STUDIES;  
\*OUTDOOR EDUCATION; \*SCIENCE ACTIVITIES; \*URBAN AREAS;  
ECOLOGY; SCIENCE EDUCATION; SCIENCE PROJECTS; SECONDARY  
SCHOOL SCIENCE; URBAN TEACHING

DESCRIBED IN CONSIDERABLE DETAIL ARE NUMEROUS STUDIES THAT  
CAN BE CARRIED OUT BY USING A VACANT LOT TO TEACH OUTDOOR  
EDUCATION IN AN URBAN SETTING. (PEB)

JOURNAL CITATION: SCIENCE ACTIVITIES; 11; 4; 32-40

ACCESSION NUMBER: EJ104958

PUBLICATION DATE: OCT 74

TITLE: NOT JUST ANOTHER PROGRAM

PERSONAL AUTHOR: HAMEL, PAUL B.

DESCRIPTOR: \*ENVIRONMENTAL EDUCATION; \*NATURAL RESOURCES;  
\*OUTDOOR EDUCATION; \*ECOLOGY; \*EDUCATIONAL PROGRAMS

THIS ARTICLE DISCUSSES THE NEED FOR PROVIDING INTERPRETIVE  
PROGRAMS IN CITY PARKS TO EXPLAIN ECOLOGICAL PRINCIPLES.  
(PD)

JOURNAL CITATION: PARKS AND RECREATION; 9; 10; 34-5, 86-7

ACCESSION NUMBER: EJ105842

PUBLICATION DATE: F 74

TITLE: OUTWARD BOUND: AN EXPERIENCE IN HUMAN DEVELOPMENT

PERSONAL AUTHOR: DANENBURG, WILLIAM; GAGGI, SILVIO

DESCRIPTOR: \*ENVIRONMENTAL EDUCATION; \*LEADERSHIP TRAINING;  
\*OUTDOOR EDUCATION; \*PROBLEM SOLVIN; \*SELF ACTUALIZATION;  
HUMAN DEVELOPMENT; INSERVICE EDUCATION

IDENTIFIER: \*OUTWARD BOUND

TWO AUTHORS DESCRIBE HOW THEIR PARTICIPATION IN AN OUTWARD BOUND PROGRAM HAS HELPED THEM DEVELOP A GREATER DEGREE OF GENERAL SELF CONFIDENCE, GREATER EASE IN DEALING WITH COMPLEX AND FRUSTRATING PROBLEMS, AND A GREATER APPRECIATION OF MAN'S PLACE IN THE NATURAL ENVIRONMENT. THEY ALSO DESCRIBE OUTWARD BOUND COURSES THAT HAVE BEEN ESPECIALLY DESIGNED FOR TEACHERS AND ADMINISTRATORS. (AUTHOR/DN)

JOURNAL CITATION: CATALYST FOR CHANGE; 4; 1; 15-17

ACCESSION NUMBER: EJ106292

PUBLICATION DATE: F 74

TITLE: OUTWARD BOUND APPROACHES TO OUTDOOR EDUCATION

PERSONAL AUTHOR: NOLD, JOSEPH J.

DESCRIPTOR: \*CURRICULUM ENRICHMENT; \*HUMAN RELATIONS PROGRAMS; \*OUTDOOR EDUCATION; \*PROGRAM DESCRIPTIONS; LEARNING MOTIVATION; PHYSICAL EDUCATION

IDENTIFIER: \*OUTWARD BOUND

THE PAPER DISCUSSES 4 TYPES OF PROGRAM ADAPTATION OF OUTWARD BOUND CONCEPTS AND METHODS: (1) MOTIVATIONAL PROGRAMS; (2) THE HUMAN RELATICNS PROGRAMS WITHIN A SCHOOL; (3) AN ALTERNATIVE TO TRADITIONAL PHYSICAL EDUCATION; AND (4) CURRICULUM ENRICHMENT. (NQ)

JOURNAL CITATION: JOURNAL OF OUTDOOR EDUCATION; 9; 1; 2-6

ACCESSION NUMBER: EJ106293

PUBLICATION DATE: F 74

TITLE: PARTICIPANTS' REASONS FOR ATTENDING THE NATIONAL  
OUTDOOR LEADERSHIP SCHOOL'S 1972 WILDERNESS EXPEDITION  
COURSES

PERSONAL AUTHOR: HENRY, W. R.; DRIVER, B. L.

DESCRIPTOR: \*COURSE EVALUATION; \*ENVIRONMENTAL EDUCATION;  
\*PARTICIPANT SATISFACTION; \*STUDENT ATTITUDES; MOTIVATION;  
OUTDOOR EDUCATION

IDENTIFIER: \*NATIONAL OUTDOOR LEADERSHIP SCHOOL; WILDERNESS  
EXPEDITION COURSES

JOURNAL CITATION: JOURNAL OF OUTDOOR EDUCATION; 9; 1; 6-13

ACCESSION NUMBER: EJ106294

PUBLICATION DATE: F 74

TITLE: OUTDOOR EDUCATION AND RESIDENTIAL EXPERIENCE

PERSONAL AUTHOR: MCEVOY, M.

DESCRIPTOR: \*ENRICHMENT EXPERIENCE; \*LEARNING MOTIVATION;  
\*OUTDOOR EDUCATION; \*RESIDENTIAL PROGRAMS; \*SOCIAL  
DEVELOPMENT; EDUCATIONAL EXPERIENCE

JOURNAL CITATION: JOURNAL OF OUTDOOR EDUCATION; 9; 1; 14-17

ACCESSION NUMBER: EJ106407

PUBLICATION DATE: OCT 74

TITLE: OUTDOOR BIOLOGY INSTRUCTIONAL STRATEGIES (OBIS)

PERSONAL AUTHOR: MCCORMACK, ALAN J.

DESCRIPTOR: \*BIOLOGICAL SCIENCES; \*ELEMENTARY SCHOOL SCIENCE; \*FIELD STUDIES; \*PROGRAM DESCRIPTIONS; \*SECONDARY SCHOOL SCIENCE; ENVIRONMENTAL EDUCATION; OUTDOOR EDUCATION; SCIENCE ACTIVITIES; SCIENCE EDUCATION

IDENTIFIER: \*OUTDOOR BIOLOGY INSTRUCTIONAL STRATEGIES; OBIS

PROVIDES AN OVERVIEW OF THE OUTDOOR BIOLOGY INSTRUCTIONAL STRATEGIES (OBIS) PROJECT. THIS PROGRAM HAS AS ITS RATIONALE THE IDEA THAT A BASIC UNDERSTANDING OF ECOSYSTEMS, POPULATIONS, COMMUNITIES, FOOD CHAINS, AND INTERACTIONS OF ORGANISMS WITH THE ENVIRONMENT IS ESSENTIAL IN MAKING INTELLIGENT DECISIONS ABOUT THE ENVIRONMENT. (PEB)

JOURNAL CITATION: SCIENCE AND CHILDREN; 12; 2; 9-12

ACCESSION NUMBER: EJ106409

PUBLICATION DATE: OCT 74

TITLE: OUTDOOR DISCOVERY LABORATORIES AT A WATERFOWL REFUGE

PERSONAL AUTHOR: FLETCHER, JACK E.

DESCRIPTOR: \*ENVIRONMENTAL EDUCATION; \*FIELD STUDIES; \*NATURE CENTERS; \*OUTDOOR EDUCATION; \*PROGRAM DESCRIPTIONS; ELEMENTARY SCHOOL STUDENTS; PRESERVICE EDUCATION; SCIENCE ACTIVITIES; SCIENCE EDUCATION

JOURNAL CITATION: SCIENCE AND CHILDREN; 12; 2; 14-15

ACCESSION NUMBER: EJ106415

PUBLICATION DATE: OCT 74

TITLE: LOOK-SEE-EXPERIENCE

PERSONAL AUTHOR: LEYH, E. EUGENE

DESCRIPTOR: \*ENVIRONMENTAL EDUCATION; \*FIELD STUDIES;  
\*NATURE CENTERS; \*OUTDOOR EDUCATION; \*TEACHING METHODS;  
ELEMENTARY SCHOOL CURRICULUM; PROGRAM DESCRIPTIONS; SCIENCE  
ACTIVITIES; SCIENCE EDUCATION; SENSORY EXPERIENCE

BRIEFLY DESCRIBES THE TEACHING METHOD USED IN AN OUTDOOR  
EDUCATION PROGRAM AT THE FREDERICK COUNTY (MARYLAND) OUTDOOR  
SCHOOL. (PEB)

JOURNAL CITATION: SCIENCE AND CHILDREN; 12; 2; 27-28

ACCESSION NUMBER: EJ106982

PUBLICATION DATE: JAN 75

TITLE: TEACHING AGRICULTURAL OUTDOOR PROGRAMS IN AN URBAN  
SETTING

PERSONAL AUTHOR: TILLMAN, CHARLES J. D.

DESCRIPTOR: \*RECREATIONAL FACILITIES; \*SCHOOL COMMUNITY  
COOPERATION; \*SOIL SCIENCE; \*TEACHING GUIDES; \*COURSE  
CONTENT; AGRICULTURAL EDUCATION; STUDENT PROJECTS; LEARNING  
ACTIVITIES; OUTDOOR EDUCATION; NATURE CENTERS

IDENTIFIER: FUTURE FARMERS OF AMERICA; FFA

AGRICULTURAL EDUCATION CAN MAKE A SUBSTANTIAL CONTRIBUTION  
TO THE QUALITY OF THE FACILITIES AND ACTIVITIES AVAILABLE  
FOR OUTDOOR RECREATION. A TEACHER RELATES THE COURSE  
CONTENT, OBJECTIVES, AND LEARNING ACTIVITIES OF THE SOILS  
PORTION OF THE CURRICULUM OF AN URBAN NATURE CENTER UTILIZED  
AS AN OUTDOOR LABORATORY. (AUTHOR/AJ)

JOURNAL CITATION: AGRICULTURAL EDUCATION MAGAZINE; 47; 7;  
160, 163

ACCESSION NUMBER: EJ107816

PUBLICATION DATE: OCT 74

TITLE: SUMMER CAMPING WITH AMERICAN INDIAN YOUTH: REPORT FROM CAMP NANA-MAH

PERSONAL AUTHOR: JACKSON, MICHAEL R.; GRIFFITHS, KENNETH A.

DESCRIPTOR: \*AMERICAN INDIANS; \*CAMPING; \*RESERVATIONS (INDIAN); \*SUMMER PROGRAMS; \*YOUTH PROGRAMS; CULTURAL AWARENESS; DAY CAMP PROGRAMS; ENRICHMENT ACTIVITIES; OUTDOOR EDUCATION

IDENTIFIER: CAMP NANA MAH

JOURNAL CITATION: JOURNAL OF AMERICAN INDIAN EDUCATION; 14; 1; 4-11

ACCESSION NUMBER: EJ107920

PUBLICATION DATE: NOV 74

TITLE: METHODS FOR PROVIDING AND USING FIELD EQUIPMENT

PERSONAL AUTHOR: JERNIGAN, H. DEAN; MURRAY, JERRY P.

DESCRIPTOR: \*FIELD STUDIES; \*SCIENCE ACTIVITIES; \*SCIENCE EQUIPMENT; \*SECONDARY SCHOOL SCIENCE; ENVIRONMENTAL EDUCATION; EQUIPMENT; FIELD TRIPS; OUTDOOR EDUCATION; PROGRAM DESCRIPTIONS; SCIENCE EDUCATION

DESCRIBES A PROGRAM FOR FIELD STUDY AND METHODS FOR SOLVING THE PROBLEM OF LIMITATIONS IN EQUIPMENT. (PEB)

JOURNAL CITATION: AMERICAN BIOLOGY TEACHER; 36; 8; 468-473

ACCESSION NUMBER: EJ107989

PUBLICATION DATE: OCT 74

TITLE: MOTIVATIONAL SCIENCE QUIZZES

PERSONAL AUTHOR: SENDOFF, GORDON J.

DESCRIPTOR: \*EVALUATION; \*MOTIVATION TECHNIQUES; \*TESTING;  
CRITICAL THINKING; CREATIVITY; MOTIVATION; OUTDOOR  
EDUCATION; SCIENCE EDUCATION; SECONDARY SCHOOL SCIENCE;  
TESTS

PROVIDES SOME EXAMPLES OF SCIENCE QUIZZES DESIGNED TO  
STIMULATE STUDENT INTEREST IN OUTDOOR EDUCATION, ANIMAL  
LORE, CRITICAL THINKING, AND AN INTERDISCIPLINARY APPROACH  
TO SCIENCE. (PEB)

JOURNAL CITATION: SCIENCE TEACHER; 41; 7; 37-38

ACCESSION NUMBER: EJ108641

PUBLICATION DATE: FEB 75

TITLE: EDUCATION FOR WORK AND LEISURE

PERSONAL AUTHOR: MARRON, THOMAS

DESCRIPTOR: \*OUTDOOR EDUCATION; \*SKILL DEVELOPMENT;  
\*LEISURE TIME; \*WORK STUDY PROGRAMS; SUMMER PROGRAMS; WORK  
ENVIRONMENT; WEEKEND PROGRAMS; AGRICULTURAL EDUCATION;  
SECONDARY EDUCATION

OUTDOOR RECREATION IS A VITALLY IMPORTANT PART OF THE  
EDUCATIONAL EXPERIENCE RECEIVED BY STUDENTS IN THE COVENTRY  
R. I. NATURAL RESOURCES PROGRAM. (BP)

JOURNAL CITATION: AGRICULTURAL EDUCATION MAGAZINE; 47; 8;  
173,177

ACCESSION NUMBER: EJ109312

PUBLICATION DATE: F 74

TITLE: THE SEA BESIDE US

PERSONAL AUTHOR: WATLING, CAROL; HALLARD RAYMOND E.

DESCRIPTOR: \*HANDICAPPED CHILDREN; \*OUTDOOR EDUCATION;  
\*SCIENCE ACTIVITIES; \*PROGRAM DESCRIPTIONS; EXCEPTIONAL  
CHILD EDUCATION; CURRICULUM; TEACHING METHODS; FIELD TRIPS

THE SEA BESIDE US FOR THE SPECIAL CHILD IS A PROJECT IN DELAWARE WITH THREE GOALS: PROVIDING OUTDOOR AND OVERNIGHT EXPERIENCES FOR HANDICAPPED CHILDREN; INTRODUCING THESE STUDENTS TO BEACH, BAY, AND MARSH ENVIRONMENTS; AND INCREASING THE NUMBER OF SPECIAL EDUCATION TEACHERS INCORPORATING SEASHORE STUDIES IN THEIR TEACHING CURRICULUM. (LS)

JOURNAL CITATION: TEACHING EXCEPTIONAL CHILDREN; 7; 1; 26-8

ACCESSION NUMBER: EJ109924

PUBLICATION DATE: NOV/DEC 74

TITLE: FIELD AIDES HELP TO TAKE SCHOOL OUTDOORS

PERSONAL AUTHOR: KELSEY, FRANCES W.

DESCRIPTOR: \*ELEMENTARY SCHOOL SCIENCE; \*ENVIRONMENTAL  
EDUCATION; \*OUTDOOR EDUCATION; \*TEACHER AIDES; \*VOLUNTEERS;  
ECOLOGY; FIELD STUDIES; PROGRAM DESCRIPTIONS; SCIENCE  
EDUCATION; SCHOOL AIDES

THE ARTICLE IDENTIFIES AND DESCRIBES A TRAINING PROGRAM DIRECTED PRIMARILY TOWARD ECOLOGY FIELD STUDY. IT IS FOR VOLUNTEERS, MAINLY MOTHERS OF SCHOOL CHILDREN, WHO ASSIST IN PROGRAMS WHERE REAL LEARNING DOES TAKE PLACE - IN AND OUT OF THE CLASSROOM. THE PROGRAM, HOW THE AIDES HELP AND SOME RELATED PROBLEMS ARE PRESENTED. (EB)

JOURNAL CITATION: SCIENCE AND CHILDREN; 12; 3; 28

ACCESSION NUMBER: EJ110089

PUBLICATION DATE: JAN-FEB 75

TITLE: EXPERIENCING PIONEER LIVING

PERSONAL AUTHOR: FERLE, HELEN L.

DESCRIPTOR: \*FIELD EXPERIENCE PROGRAMS; \*OUTDOOR EDUCATION;  
\*ACTIVITY LEARNING; \*UNITED STATES HISTORY; STUDENT  
EXPERIENCE; SIMULATION; JUNIOR HIGH SCHOOLS; SOCIAL STUDIES

IDENTIFIER: \*PICNEER LIFE

MIDDLE SCHOOL STUDENTS WHO LEARN ABOUT NINETEENTH-CENTURY AMERICA THROUGH \*TEXTS\* SUCH AS LAURA INGALLS WILDER'S \*LITTLE HOUSE ON THE PRAIRIE\* SERIES, ALSO CONDUCT INVESTIGATIONS INTO THEIR OWN BACKGROUNDS, AND THROUGH AN HONORS ELECTIVE, LOG CABIN LIVING, COMBINE ART, SOCIAL STUDIES AND OUTDOOR-LIVING. (JH)

JOURNAL CITATION: SOCIAL STUDIES; 66; 1; 14-15

ACCESSION NUMBER: EJ113096

PUBLICATION DATE: 74

TITLE: STUDENT BEHAVIOR AND PARTICIPATION IN OUTDOOR EDUCATION PROGRAMS

PERSONAL AUTHOR: ASKHAM, LEONARD R.

DESCRIPTOR: \*ENVIRONMENTAL EDUCATION; \*EVALUATION;  
\*INTERACTION PROCESS ANALYSIS; \*OUTDOOR EDUCATION; \*TEACHER  
BEHAVIOR; RESEARCH

IN PRESENTING CLASSIFICATION PROBLEMS TO A RANDOM SAMPLING OF FOURTH, FIFTH, AND SIXTH GRADE STUDENTS, THE AUTHOR WAS ABLE TO DEVISE A METHOD OF USING INTERACTION ANALYSIS AS A TOOL TO MEASURE STUDENT BEHAVIOR PATTERNS IN THE OUTDOORS. LIMITATIONS INCLUDED THE INABILITY TO CATEGORIZE NON-VERBAL BEHAVIOR. (MA)

JOURNAL CITATION: JOURNAL OF ENVIRONMENTAL EDUCATION; 6; 1;  
7-15

ACCESSION NUMBER: EJ113103

PUBLICATION DATE: 74

TITLE: HOW TO USE WINTER FIELD TRIPS

PERSONAL AUTHOR: COLLINS, MICHAEL

DESCRIPTOR: \*ENVIRONMENTAL EDUCATION; \*FIELD TRIPS;  
\*OUTDOOR EDUCATION; NATURAL RESOURCES; SCIENCE EDUCATION;  
UNDERGRADUATE STUDY

IDENTIFIER: \*NEWFOUNDLAND

JOURNAL CITATION: JOURNAL OF ENVIRONMENTAL EDUCATION; 6; 1;  
59-60

ACCESSION NUMBER: EJ113282

PUBLICATION DATE: FEB 75

TITLE: GETTING IT TOGETHER: AN ENVIRONMENTAL SIMULATION  
PROBLEM

PERSONAL AUTHOR: HACKETT, JAY K.

DESCRIPTOR: \*ENVIRONMENTAL EDUCATION; \*OUTDOOR EDUCATION;  
\*SCIENCE EDUCATION; \*SIMULATION; ENVIRONMENTAL INFLUENCES;  
FIELD STUDIES; PROGRAM DESCRIPTIONS; SECONDARY SCHOOL  
SCIENCE; SCIENCE ACTIVITIES

IDENTIFIER: \*COLORADO

DESCRIBES AN ENVIRONMENTAL SIMULATION EXERCISE CONDUCTED AT  
AN OUTDOOR CAMP IN COLORADO. THE TWO SIMULATIONS INVOLVED  
THE PHYSICAL, SOCIAL, POLITICAL AND ENVIRONMENTAL FACTORS  
WHICH MIGHT INFLUENCE CONSTRUCTION OF AN AIRPORT IN THE  
ROCKY MOUNTAIN NATIONAL PARK AND FACTORS ASSOCIATED WITH A  
NUCLEAR GENERATING PLANT. (BR)

JOURNAL CITATION: SCIENCE TEACHER; 42; 2; 47-50

ACCESSION NUMBER: EJ113285

PUBLICATION DATE: FEB 75

TITLE: BICYCLE FIELD TRIPS

PERSONAL AUTHOR: PETERSON, EDWARD A.

DESCRIPTOR: \*ENVIRONMENTAL EDUCATION; \*FIELD TRIPS;  
\*SCIENCE ACTIVITIES; INSTRUCTION; OUTDOOR EDUCATION; SCIENCE  
EDUCATION; SECONDARY SCHOOL SCIENCE

JOURNAL CITATION: SCIENCE TEACHER; 42; 2; 54

ACCESSION NUMBER: EJ114702

PUBLICATION DATE: W 75

TITLE: OUTDOOR EDUCATION, CONSERVATION EDUCATION: A QUANTUM  
JUMP

PERSONAL AUTHOR: KIRK, JOHN J.

DESCRIPTOR: \*CONSERVATION EDUCATION; \*DEFINITIONS;  
\*ENVIRONMENTAL EDUCATION; \*EDUCATIONAL TRENDS; \*OUTDOOR  
EDUCATION; HISTORY

THE "QUANTUM JUMP" IS THE JUMP FROM OUTDOOR EDUCATION AND  
CONSERVATION EDUCATION TO THE BRCADER AND SOMEWHAT DIFFERENT  
CONCEPT OF ENVIRONMENTAL EDUCATION. (JC)

JOURNAL CITATION: JOURNAL OF OUTDOOR EDUCATION; 9; 2; 2-7

ACCESSION NUMBER: EJ114704

PUBLICATION DATE: W 75

TITLE: OUTDOOR EDUCATION: A YEAR-ROUND-PROGRAM

PERSONAL AUTHOR: NELSON, RAY A.

DESCRIPTOR: \*ACTIVITIES; \*EDUCATIONAL ALTERNATIVES;  
\*ECOLOGY; \*OUTDOOR EDUCATION; ELEMENTARY SECONDARY EDUCATION

IDENTIFIER: \*WINTER

SUGGESTIONS ARE GIVEN FOR OUTDOOR EDUCATION ACTIVITIES  
UTILIZING THE ECOLOGICAL IMPACT OF A COLD WINTER  
ENVIRONMENT. (JC)

JOURNAL CITATION: JOURNAL OF OUTDOOR EDUCATION; 9; 2; 11-14

ACCESSION NUMBER: EJ114705

PUBLICATION DATE: W 75

TITLE: THE NORTHWESTERN ARCHEOLOGICAL PROGRAM: DIRECT  
STUDENT INVOLVEMENT IN THE ARCHEOLOGICAL PROCESS

PERSONAL AUTHOR: GILMOUR, PETER; STRUEVER, STUART

DESCRIPTOR: \*ARCHAEOLOGY; \*EDUCATIONAL ALTERNATIVES; \*FIELD  
EXPERIENCE PROGRAMS; \*HIGHER EDUCATION; \*OUTDOOR EDUCATION;  
PROGRAM DESCRIPTIONS; SECONDARY EDUCATION; STUDENT  
RESPONSIBILITY; SUMMER SCIENCE PROGRAMS

IDENTIFIER: ILLINOIS

NORTHWESTERN UNIVERSITY'S ARCHEOLOGICAL PROGRAM HAS  
DEVELOPED A WIDE RANGE OF EDUCATIONAL PROGRAMS WHICH FEATURE  
DIRECT STUDENT (JUNIOR HIGH THROUGH PH.D. CANDIDATES AND OUT  
OF SCHOOL ADULTS) INVOLVEMENT IN THE FIELD. (JC)

JOURNAL CITATION: JOURNAL OF OUTDOOR EDUCATION; 9; 2; 14-19

ACCESSION NUMBER: EJ114786

PUBLICATION DATE: FEB 75

TITLE: AN ECCOLOGICAL-HISTORICAL SURVEY OF THE MISSISSIPPI RIVER

PERSONAL AUTHOR: REYMAN, JOSEPH A.

DESCRIPTOR: \*ENVIRONMENTAL EDUCATION; \*FIELD TRIPS; \*FIELD STUDIES; \*OUTDOOR EDUCATION; ENVIRONMENTAL INFLUENCES; INSTRUCTION; INTERDISCIPLINARY APPROACH; PHOTOGRAPHY; SCIENCE EDUCATION; SECONDARY SCHOOL SCIENCE

IDENTIFIER: MISSISSIPPI RIVER

DESCRIBES AN ENVIRONMENTAL EDUCATION PROGRAM WHICH CENTERS ITS STUDY ON A ONE-WEEK RIVER TRIP ON THE MISSISSIPPI, THE PURPOSE OF WHICH IS TO DISCOVER, THROUGH LABORATORY PROCEDURES AND PEOPLE CONCERNED WITH THE RIVER, WHAT ITS PRESENT CONDITION IS. (BR)

JOURNAL CITATION: AMERICAN BIOLOGY TEACHER; 37; 2; 94-96

ACCESSION NUMBER: EJ114793

PUBLICATION DATE: FEB 75

TITLE: CN-CAMPUS OUTDOOR NATURE AREA

PERSONAL AUTHOR: BUFORD, LAWRENCE

DESCRIPTOR: \*EDUCATIONAL FACILITIES; \*ENVIRONMENTAL EDUCATION; \*OUTDOOR EDUCATION; \*SCHOOL LOCATION; BIOLOGY; FIELD STUDIES; SCIENCE EDUCATION; SECONDARY SCHOOL SCIENCE; SCIENCE ACTIVITIES

IDENTIFIER: \*OUTDOOR NATURE AREA

JOURNAL CITATION: AMERICAN BIOLOGY TEACHER; 37; 2; 114-116

ACCESSION NUMBER: EJ114807

PUBLICATION DATE: NOV 74

TITLE: OUTDOOR LABORATORIES

PERSONAL AUTHOR: ZAK, FRANK; SWAN, PETER

DESCRIPTOR: \*ECOLOGY; \*OUTDOOR EDUCATION; \*SECONDARY  
EDUCATION; ENVIRONMENTAL EDUCATION; INSTRUCTION; SCIENCE  
EDUCATION; SECONDARY SCHOOL SCIENCE; SCIENCE LABORATORIES

IDENTIFIER: \*AUSTRALIA

JOURNAL CITATION: AUSTRALIAN SCIENCE TEACHERS JOURNAL; 20;  
3; 69-76

ACCESSION NUMBER: EJ114858

PUBLICATION DATE: SEP 74

TITLE: PRIMARY SCIENCE AND HALLET COVE

PERSONAL AUTHOR: SIMPSON, S.

DESCRIPTOR: \*ELEMENTARY SCHOOL SCIENCE; \*EARTH SCIENCE;  
\*FIELD TRIPS; \*INSERVICE TEACHER EDUCATION; INSTRUCTION;  
OUTDOOR EDUCATION; SCIENCE EDUCATION

IDENTIFIER: SOUTH AUSTRALIA

ARTICLE DESCRIBES HOW INSERVICE INSTRUCTION CAN MAKE A  
FIELD TRIP FOR PRIMARY GRADES A GOOD LEARNING EXPERIENCE FOR  
TEACHERS AND STUDENTS. (BR)

JOURNAL CITATION: SOUTH AUSTRALIAN SCIENCE TEACHERS  
JOURNAL; 743; 38

ACCESSION NUMBER: EJ114859

PUBLICATION DATE: SEP 74

TITLE: THE NEED FOR THE GOVERNMENT TO ACQUIRE AND PRESERVE AN EXTENSIVE AREA OF LAND AT HALLET COVE AS MAJOR DISTRICT OPEN SPACE

DESCRIPTOR: \*INSTRUCTION; \*OUTDOOR EDUCATION; \*PRESERVATION; ENVIRONMENTAL EDUCATION; GENERAL SCIENCE; FEDERAL LEGISLATION; LAND USE; SCIENCE EDUCATION

IDENTIFIER: \*SOUTH AUSTRALIA; HALLET COVE

OUTLINES THE REASONS WHY HALLET COVE SHOULD BE ACQUIRED AND PRESERVED A MAJOR DISTRICT OPEN SPACE. (BR)

JOURNAL CITATION: SOUTH AUSTRALIAN SCIENCE TEACHERS JOURNAL; 743; 39-42

ACCESSION NUMBER: EJ114974

PUBLICATION DATE: W 75

TITLE: CLASS OF THE WOODLANDS: BORED CM STOPPER

PERSONAL AUTHOR: MCCORMICK, TERENCE

DESCRIPTOR: \*ENVIRONMENTAL EDUCATION; \*SUMMER SCIENCE PROGRAMS; \*SCIENCE EDUCATION; \*OUTDOOR EDUCATION; SCIENCE COURSES; STUDENT MOTIVATION; LEARNING ACTIVITIES; COURSE CONTENT; SECONDARY EDUCATION

A FIVE WEEK OUTDOOR SUMMER SCIENCE CLASS EMPHASIZING STUDENT INVOLVEMENT IS DESCRIBED. (DE)

JOURNAL CITATION: SOCIAL SCIENCE RECORD; 12; 2; 39-41

ACCESSION NUMBER: EJ116442

PUBLICATION DATE: MAR 75

TITLE: MAPLE SUGARING

PERSONAL AUTHOR: PETERSON, ANDREA

DESCRIPTOR: \*AMERICAN INDIANS; \*CULTURAL ACTIVITIES;  
\*HISTORY; \*OUTDOOR EDUCATION; ELEMENTARY SCHOOL STUDENTS;  
FOOD

IDENTIFIER: \*MAPLE SUGAR

AT THE GRAND PORTAGE ELEMENTARY SCHOOL ON A CHIPPEWA  
RESERVATION IN MINNESOTA, CHILDREN MADE MAPLE SYRUP AS A  
SCHOOL PROJECT. (AUTHOR)

JOURNAL CITATION: WEEWISH TREE; 3; 6; 6-11

ACCESSION NUMBER: EJ116566

PUBLICATION DATE: MAR 75

TITLE: OUTDOOR BIOLOGY INSTRUCTIONAL STRATEGIES: DEVELOPMENT  
AND EVALUATION

PERSONAL AUTHOR: FALK, JOHN; AND OTHERS

DESCRIPTOR: \*BIOLOGY; \*COURSE DESCRIPTIONS; \*EVALUATION;  
\*INSTRUCTION; \*OUTDOOR EDUCATION; ENVIRONMENTAL EDUCATION;  
SCIENCE EDUCATION; SECONDARY SCHOOL SCIENCE

IDENTIFIER: \*OUTDOOR BIOLOGY INSTRUCTIONAL STRATEGIES;  
OBIS; RESEARCH REPORTS

DISCUSSES THE OBJECTIVES OF OUTDOOR BIOLOGY INSTRUCTIONAL  
STRATEGIES (OBIS), ONE ASPECT OF THE PROGRAM (LAWN  
COMMUNITIES) AND THE EVALUATION OF THIS ACTIVITY. INCLUDES  
RESULTANT RECOMMENDATIONS. THE EVALUATION CRITERIA ARE  
SUGGESTED AS A MODEL TO BE USED IN EITHER DESIGNING OR IN  
EVALUATING CURRICULA. (BR)

JOURNAL CITATION: AMERICAN BIOLOGY TEACHER; 37; 3;  
162-164,173

ACCESSION NUMBER: EJ116629

PUBLICATION DATE: APR 75

TITLE: FIELD TRIP STUDIES ON CAPE HATTERAS

PERSONAL AUTHOR: WOOD, JOHN H.

DESCRIPTOR: \*COURSE DESCRIPTIONS; \*FIELD TRIPS; \*MARINE BIOLOGY; \*OUTDOOR EDUCATION; ENVIRONMENTAL EDUCATION; FIELD STUDIES; INSTRUCTION; SCIENCE EDUCATION; SECONDARY EDUCATION

IDENTIFIER: CUTER BANKS (NORTH CAROLINA)

JOURNAL CITATION: SCIENCE TEACHER; 42; 4; 23-25

ACCESSION NUMBER: EJ116637

PUBLICATION DATE: APR 75

TITLE: K-12 NATURAL HISTORY VISITATION SITE

PERSONAL AUTHOR: HIGHFILL, KENNETH M.

DESCRIPTOR: \*ENVIRONMENTAL EDUCATION; \*EDUCATIONAL FACILITIES; \*INSTRUCTION; \*OUTDOOR EDUCATION; \*SIMULATED ENVIRONMENT; BIOLOGY; ELEMENTARY SECONDARY EDUCATION; SCIENCE EDUCATION; SECONDARY SCHOOL SCIENCE; STUDENT PARTICIPATION

DESCRIBES A NATURAL HISTORY VISITATION SITE FOR WHICH BIOLOGY STUDENTS SERVE AS RESOURCE PERSONS AND DISCUSS NATURAL HISTORY WITH ELEMENTARY STUDENTS. (BR)

JOURNAL CITATION: SCIENCE TEACHER; 42; 4; 40

ACCESSION NUMBER: EJ118286

PUBLICATION DATE: JAN 75

TITLE: 1975 WILDERNESS OUTINGS

DESCRIPTOR: \*CAMPING; \*OUTDOOR EDUCATION; \*RECREATIONAL PROGRAMS; ENVIRONMENTAL EDUCATION; FIELD STUDIES; LEISURE TIME; RECREATIONAL ACTIVITIES; SUMMER PROGRAMS; TRAILS

IDENTIFIER: \*SIERRA CLUB

LISTED AND DESCRIBED ARE WILDERNESS OUTINGS AVAILABLE IN 1975 THROUGH THE SIERRA CLUB. THESE INCLUDE: FAMILY TRIPS; UNDERWATER EXPLORATION; BICYCLE TRIPS; WATER TRIPS; HAWAIIAN AND ALASKAN TRIPS; FOREIGN TRIPS; HIGH-LIGHT TRIPS; SADDLE-LIGHT TRIPS; KNAPSACK TRIPS; SERVICE TRIPS; BURRO TRIPS AND SPRING TRIPS. TRIP COSTS AND RESERVATIONS ARE DISCUSSED. (BT)

JOURNAL CITATION: SIERRA CLUB BULLETIN; 60; 1; 3-56

ACCESSION NUMBER: EJ118771

PUBLICATION DATE: MAY 75

TITLE: OUTDOOR ALTERNATIVES

PERSONAL AUTHOR: LYMAN, THOMAS G., JR.

DESCRIPTOR: \*OUTDOOR EDUCATION; \*STUDENT ATTITUDES; \*INDIVIDUAL DEVELOPMENT; \*PROGRAM DEVELOPMENT; \*SKILL DEVELOPMENT; EDUCATIONAL NEEDS; STUDENT INTERESTS; PROBLEM SOLVING

ARTICLE FOCUSED ON THE RENEWED INTEREST IN OUTDOOR SKILL AND EXPERIENCE PROGRAMS THAT HAS SURGED AMONG SECONDARY SCHOOLS OVER THE LAST FIVE YEARS. (AUTHOR/RK)

JOURNAL CITATION: INDEPENDENT SCHOOL BULLETIN; 34; 4; 34-6

ACCESSION NUMBER: EJ119391

PUBLICATION DATE: APR 74

TITLE: OUTDOOR EDUCATION FOR THE RETARDED CHILD

PERSONAL AUTHOR: CORMANY, ROBERT B.

DESCRIPTOR: \*HANDICAPPED CHILDREN; \*INTERMEDIATE GRADES;  
\*SPECIAL EDUCATION; \*PROGRAM DESCRIPTIONS; \*OUTDOOR  
EDUCATION; EXCEPTIONAL CHILD EDUCATION; CAMPING

JOURNAL CITATION: EDUCATION AND TRAINING OF THE MENTALLY  
RETARDED; 9; 2; 66-9

ACCESSION NUMBER: EJ119831

PUBLICATION DATE: SPR 75

TITLE: A SENSE OF PLACE—A1

PERSONAL AUTHOR: GUSSOW, ALAN

DESCRIPTOR: \*COMMUNICATION (THOUGHT TRANSFER); \*EDUCATIONAL  
PHILOSOPHY; \*EXPERIENCE; \*OUTDOOR EDUCATION; \*SELF  
EVALUATION; DEFINITIONS; ENVIRONMENT; INTERACTION; SELF  
EXPRESSION

OUTDOOR EDUCATION IS DISCUSSED IN TERMS OF EXPERIENCING THE  
WORLD, EVALUATING THOSE EXPERIENCES IN TERMS OF SELF,  
COMMUNICATING THOSE EVALUATIONS TO OTHERS, AND ESTABLISHING  
A REAL AND/OR METAPHYSICAL PLACE IN THE WORLD. (JC)

JOURNAL CITATION: COMMUNICATOR; 6; 2; 2-4

ACCESSION NUMBER: EJ119832

PUBLICATION DATE: SPR 75

TITLE: A SENSE OF PLACE—2

PERSONAL AUTHOR: GOODKIND, THOMAS B.

DESCRIPTOR: \*DISCOVERY LEARNING; \*OUTDOOR EDUCATION;  
\*SOCIAL STUDIES UNITS; \*UNITED STATES HISTORY; CAMPING;  
ENRICHMENT EXPERIENCE; EDUCATIONAL ALTERNATIVES; GRADE 5

IDENTIFIER: \*PIONEERS

CULMINATION OF A 3 WEEK SOCIAL STUDIES UNIT ON U.S. ,  
PIONEERS AND WESTWARD EXPANSION INVOLVED A WEEKEND TRIP BY  
WAGON TRAIN FOR 5TH GRADERS IN SOUTH WINDSOR, CONNECTICUT.  
(JC)

JOURNAL CITATION: COMMUNICATOR; 6; 2; 5-7

ACCESSION NUMBER: EJ119833

PUBLICATION DATE: SPR 75

TITLE: WILDFLOWERS: A HERITAGE ENDANGERED

PERSONAL AUTHOR: FISCHER, RICHARD B.

DESCRIPTOR: \*ACTIVITIES; \*CONSERVATION EDUCATION; \*OUTDOOR  
EDUCATION; \*PLANT IDENTIFICATION; ECOLOGY; LAWS; PLANT  
GROWTH

IDENTIFIER: \*WILDFLOWERS.

JOURNAL CITATION: COMMUNICATOR; 6; 8-15

ACCESSION NUMBER: EJ119834

PUBLICATION DATE: SPR 75

TITLE: DOES WHAT WE TEACH HAVE VALUE?

PERSONAL AUTHOR: METCALFE, JOHN A.

DESCRIPTOR: \*BIOLOGICAL SCIENCES; \*EDUCATIONAL PHILOSOPHY;  
\*HIGHER EDUCATION; \*OUTDOOR EDUCATION; \*VALUES; EFFECTIVE  
TEACHING; EDUCATIONAL OBJECTIVES; SECONDARY EDUCATION

JOURNAL CITATION: COMMUNICATOR; 6; 2; 16-17

ACCESSION NUMBER: EJ119835

PUBLICATION DATE: SPR 75

TITLE: PHOTOGRAPHING NATURE

PERSONAL AUTHOR: SKUPIEN, LAWRENCE J.

DESCRIPTOR: \*OUTDOOR EDUCATION; \*PHOTOGRAPHY;  
\*PHOTOCOMPOSITION; \*SLIDES; \*TEACHING METHODS; PHOTOGRAPHIC  
EQUIPMENT

TIPS ON HOW TO TAKE BETTER SLIDES AND HOW TO PRESENT THEM  
TO AN AUDIENCE IN AN EDUCATIONAL MANNER CONSTITUTE THE  
SUBJECT MATTER OF THIS ARTICLE. (JC)

JOURNAL CITATION: COMMUNICATOR; 6; 2; 18-19

ACCESSION NUMBER: EJ119837

PUBLICATION DATE: SPR 75

TITLE: HELPING CHILDREN BECOME AWARE OF THE NATURAL ENVIRONMENT

PERSONAL AUTHOR: JOSLIN, ROBERT O.

DESCRIPTOR: \*ACTIVITIES; \*ELEMENTARY EDUCATION; \*OUTDOOR EDUCATION; \*TEACHING METHODS; \*TEACHER ATTITUDES; DISCOVERY LEARNING; EFFECTIVE TEACHING; ECOLOGY; SENSORY INTEGRATION

JOURNAL CITATION: COMMUNICATOR; 6; 2; 26-9

ACCESSION NUMBER: EJ119838

PUBLICATION DATE: SPR 75

TITLE: THE HANDICAPPED IN THE OUTDOORS

PERSONAL AUTHOR: SHELTMIRE, JACK C.

DESCRIPTOR: \*ACTIVITIES; \*MENTALLY HANDICAPPED; \*OUTDOOR EDUCATION; \*PHYSICALLY HANDICAPPED; \*SPECIAL EDUCATION; COMMUNITY RESPONSIBILITY; CAMPING; EDUCATIONAL ALTERNATIVES; FIELD TRIPS; PROGRAM DESCRIPTIONS

JOURNAL CITATION: COMMUNICATOR; 6; 2; 30-1

ACCESSION NUMBER: EJ119840

PUBLICATION DATE: SPR 75

TITLE: BACKPACKING IN COMFORT

PERSONAL AUTHOR: AUGUST, IRWIN

DESCRIPTOR: \*CAMPING; \*EQUIPMENT; \*NEEDS; \*OUTDOOR  
EDUCATION; DEFINITIONS; WEIGHT

IDENTIFIER: \*BACKPACKING

BACKPACKING EQUIPMENT IS DISCUSSED AND DEFINED IN TERMS OF  
THE CONTROLLING FACTOR OF WEIGHT. (JC)

JOURNAL CITATION: COMMUNICATOR; 6; 2; 34-8

ACCESSION NUMBER: EJ119842

PUBLICATION DATE: SPR 75

TITLE: MAPPING IN THE OUTDOOR EDUCATION PROGRAM

PERSONAL AUTHOR: ARBUCCI, ROBERT

DESCRIPTOR: \*EQUIPMENT; \*LEARNING ACTIVITIES; \*MAP SKILLS;  
\*OUTDOOR EDUCATION; \*UNITS OF STUDY (SUBJECT FIELDS)

JOURNAL CITATION: COMMUNICATOR; 6; 2; 43-5

ACCESSION NUMBER: EJ119936 7

PUBLICATION DATE: MAY 75

TITLE: OUTDOOR EDUCATION: ENVIRONMENTAL IMMERSION FOR OKLAHOMA TEACHERS

PERSONAL AUTHOR: KELLOGG, DON; AND OTHERS

DESCRIPTOR: \*ELEMENTARY SCHOOL TEACHERS; \*FIELD STUDIES; \*INSERVICE TEACHER EDUCATION; \*SCIENCE COURSE IMPROVEMENT PROJECT; ENVIRONMENTAL EDUCATION; ELEMENTARY SCHOOL SCIENCE; HIGHER EDUCATION; OUTDOOR EDUCATION; PROGRAM DESCRIPTIONS; SCIENCE EDUCATION

DESCRIBES A SUMMER WORKSHOP, FUNDED BY THE NATIONAL SCIENCE FOUNDATION, TO TRAIN ELEMENTARY TEACHERS IN OKLAHOMA TO SERVE AS LEADERS IN IMPLEMENTING MODERN ELEMENTARY SCHOOL SCIENCE CURRICULUM PROGRAMS. (PB)

JOURNAL CITATION: SCIENCE TEACHER; 42; 5; 46-48

ACCESSION NUMBER: EJ121513

PUBLICATION DATE: 74-75

TITLE: THE GROWTH OF THE CONCEPT OF NATURE RECREATION

PERSONAL AUTHOR: VINAL, WILLIAM GOULD

DESCRIPTOR: \*AUTOBIOGRAPHIES; \*CONSERVATION EDUCATION; \*ENVIRONMENTAL EDUCATION; \*NATURAL RESOURCES; OUTDOOR EDUCATION; SCIENCE EDUCATION; TEACHERS

IDENTIFIER: \*VINAL (WILLIAM)

THIS ARTICLE RELATES THE LIFE EXPERIENCE OF WILLIAM GOULD VINAL, ONE OF THE LAST OF THE "SECOND GENERATION" NATURALIST-EDUCATORS IN NORTH AMERICA. WRITTEN BY VINAL, THE ARTICLE PINPOINTS OVER 50 EXPERIENCES WHICH RELATE DIRECTLY TO VINAL'S NATURE RECREATION/EDUCATION ACTIVITIES, 1881-1951. (TK)

JOURNAL CITATION: NATURE STUDY; 28; 4; 1-8

ACCESSION NUMBER: EJ121514

PUBLICATION DATE: 74-75

TITLE: PUTTING VINAL IDEAS TO WORK . . .

DESCRIPTOR: \*CONSERVATION EDUCATION; \*ENVIRONMENTAL  
EDUCATION; \*INSTRUCTION; \*NATURAL RESOURCES; OUTDOOR  
EDUCATION; PEER RELATIONSHIP; SCIENCE EDUCATION; TEACHERS

IDENTIFIER: \*VINAL (WILLIAM)

THIS SECTION IS A COLLECTION OF SHORT ARTICLES BY  
INDIVIDUALS DESCRIBING HOW THEIR LIVES OR CAREERS HAVE BEEN  
INFLUENCED BY WILLIAM GOULD VINAL. INCLUDED ARE SUCH TITLES  
AS: WHAT IS A NATURE TRAIL?, HOW BEST TO TEACH, NATURE  
"FIRSTS," AND CAP'N BILL AND THE TEACHABLE MOMENT. (TK)

JOURNAL CITATION: NATURE STUDY; 28; 4; 9-38

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ACCESSION NUMBER: EJ121516

PUBLICATION DATE: 74-75

TITLE: TEN MINUTE FIELD TRIPS

PERSONAL AUTHOR: RUSSELL, HELEN ROSS

DESCRIPTOR: \*FIELD TRIPS; \*FIELD INSTRUCTION; \*INSTRUCTION;  
\*TEACHING TECHNIQUES; CONSERVATION EDUCATION; ENVIRONMENTAL  
EDUCATION; OUTDOOR EDUCATION; SCIENCE EDUCATION; TEACHING  
METHODS

THIS ARTICLE DISCUSSES THE VALUES OF FIELD TRIPS, AND THE  
PROBLEMS WHICH ARISE IN PLANNING, SERVING TO DISCOURAGE  
THEIR USE AS A TEACHING TECHNIQUE. THE SHORT FIELD TRIP ON  
SCHOOL PROPERTY IS PROPOSED AND DISCUSSED AS A MEANS OF  
AVOIDING MANY PROBLEMS. A BOOK OF IDEAS BY RUSSELL FOR SHORT  
FIELD TRIPS IS AVAILABLE. (TK)

JOURNAL CITATION: NATURE STUDY; 28; 4; 44-45

ACCESSION NUMBER: EJ121555

PUBLICATION DATE: MAY-JUN 75

TITLE: CUT-OF-DOORS EARTH SCIENCE ONE REASON WHY

PERSONAL AUTHOR: MCNAMARA, EUGENE S.; FOWLER, H. SEYMOUR

DESCRIPTOR: \*ACHIEVEMENT; \*EARTH SCIENCE; \*INSTRUCTION;  
\*OUTDOOR EDUCATION; \*SECONDARY SCHOOL SCIENCE; CRITICAL  
THINKING; DISCOVERY LEARNING; EDUCATIONAL RESEARCH; SCIENCE  
EDUCATION; SECONDARY EDUCATION

IDENTIFIER: RESEARCH REPORTS

A COMPARISON IS MADE BETWEEN A LEARNING SITUATION HELD IN AN OUTDOOR ENVIRONMENT AS OPPOSED TO ONE IN THE INDOOR CLASSROOM. DIFFERENCES IN ACHIEVEMENT, CRITICAL THINKING AND PREFERENCE FOR THE ENVIRONMENT WERE SOUGHT. THE METHODOLOGY USED, THE HYPOTHESES TESTED AND TABULATED DATA ARE PRESENTED. (EB)

JOURNAL CITATION: SCHOOL SCIENCE AND MATHEMATICS; 75; 5;  
413-418

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